Table 1

## Case A
## Alaska Total Population by Age, 1980-2000

| Age Group | Population/Year | | | | | Annual Growth Rate/Time Period | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 1987 | 1986 | 1985 | 1980 | 1987-2000 | 1986-2000 | 1985-2000 | 1980-2000 |
| 0-4 | 45,933 | 56,288 | 59,592 | 59,980 | 38,949 | -1.55% | -1.84% | -1.76% | 0.83% |
| 5-13 | 78,226 | 78,719 | 79,076 | 77,809 | 62,363 | -0.05 | -0.08 | 0.04 | 1.14 |
| 14-17 | 33,391 | 31,287 | 32,016 | 31,698 | 29,433 | 0.50 | 0.30 | 0.35 | 0.63 |
| 18-24 | 59,073 | 62,607 | 67,004 | 69,206 | 59,773 | -0.45 | -0.90 | -1.05 | -0.06 |
| 25-34 | 97,094 | 123,434 | 128,401 | 127,974 | 90,808 | -1.83 | -1.98 | -1.82 | 0.34 |
| 35-44 | 109,681 | 91,505 | 89,913 | 86,068 | 54,022 | 1.40 | 1.43 | 1.63 | 3.60 |
| 45-54 | 80,350 | 46,202 | 45,082 | 43,569 | 34,243 | 4.35 | 4.21 | 4.16 | 4.36 |
| 55-64 | 38,605 | 28,565 | 28,454 | 28,043 | 20,713 | 2.34 | 2.20 | 2.15 | 3.16 |
| 65-74 | 20,623 | 13,334 | 12,580 | 11,862 | 8,312 | 3.41 | 3.59 | 3.76 | 4.65 |
| 75-84 | 10,229 | 4,754 | 4,439 | 4,136 | 2,616 | 6.07 | 6.14 | 6.22 | 7.06 |
| 85+ | 1,894 | 1,105 | 1,043 | 955 | 619 | 4.23 | 4.35 | 4.67 | 5.75 |
| TOTAL | 575,100 | 537,800 | 547,600 | 541,300 | 401,851 | 0.52% | 0.35% | 0.40% | 1.81% |

Sources: U.S. Bureau of the Census;
Alaska Department of Labor, Research & Analysis Section.

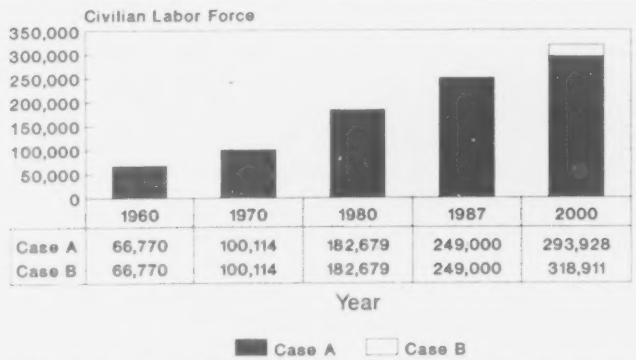
By way of comparison, the U.S.' 1986-2000 annual population growth rate is projected to be 0.75%. (This is the 'moderate case projection' forecast by the U.S. Bureau of Labor Statistics.)

Thus, under the more likely Case A scenario, the Alaska population will grow somewhat more slowly than that of the U.S. as a whole. This is due to relatively slow employment growth during the forecast period, 1987 to 2000. However, this comparison is distorted by the fact that Alaska, unlike the U.S., was still in a deep recession at the start of this period.

It's safe to say that population growth in Alaska will trail employment growth, as the employment-to-population ratio continues to trend upwards. Case A's annual population growth rate of 0.52% for 1987 to 2000 is significantly lower than the annual growth rate of total employment, 1.5%. In the Case B scenario, the population growth rate of 1.11% comes in lower than the employment growth rate of 2.1 percent.

Figure 3

## Alaska Civilian Labor Force 1960-2000
## Cases A & B




Note: Cases A & B are based on different civilian employment projections.
Sources: U.S. Census Bureau; Alaska Department of Labor, Research & Analysis Section.

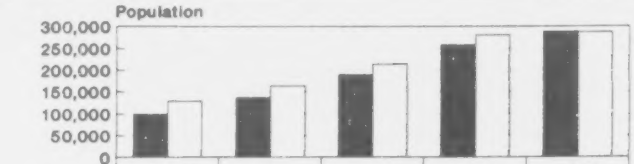
### Like Other Americans, Alaskans are Growing Older

Partly explaining this disparity between population and employment growth is the faster relative growth of older Alaskans. (See Table 1.) Those in the prime working age population — those aged 25-to-54 — will have an annual growth rate of 0.7% in Case A, and 1.3% in Case B.

Like the American age profile, Alaskans will grow older between 1987 and 2000. The median age in Alaska will rise from 28.3 years to 31.5 years. (See Figure 2.) The U.S. median age in the year 2000, though, will remain well above that at 38.9 years.

*Figure 4*

## Alaska Total Population by Sex 1960-2000 Case A




| | 1960 | 1970 | 1980 | 1987 | 2000 |
|---|---|---|---|---|---|
| Female | 97,579 | 137,124 | 188,810 | 257,893 | 287,807 |
| Male | 128,588 | 163,258 | 213,041 | 279,907 | 287,293 |
| Total | 226,167 | 300,382 | 401,851 | 537,800 | 575,100 |
| Pct. Female | 43.1 | 45.6 | 47 | 48 | 50 |

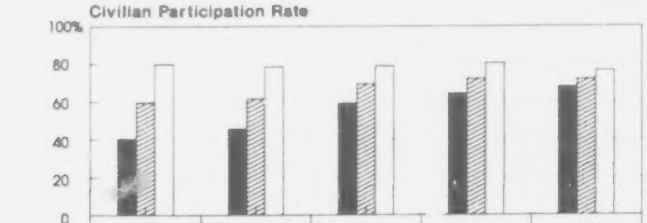
Year

Female Male

Note: Cases A & B are based on different civilian employment projections.
Sources: U.S. Census Bureau; Alaska Department of Labor, Research & Analysis Section.

*Figure 5*

## Civilian Labor Force Participation Rate by Sex Alaska 1960-2000




| | 1960 | 1970 | 1980 | 1987 | 2000 |
|---|---|---|---|---|---|
| Female | 40.4% | 45.7% | 59.0% | 64.4% | 67.7% |
| Total | 59.4% | 61.5% | 69.1% | 72.2% | 71.8% |
| Male | 79.8% | 78.6% | 79.0% | 80.4% | 76.5% |

Year

Female Total Male

Sources: U.S. Census Bureau; Bureau of Labor Statistics; Alaska Department of Labor, Research & Analysis Section.

### The Alaska Labor Force Will Become Increasingly Female

Changes in the labor force are determined by changes in population and in labor force participation rates (the percentage of those over 15 years old who are in the labor force). Between 1987 and 2000, the Alaska labor force will become increasingly female. This development is a result of shifts in the composition of the population and changes in participation rates.

Based on the Case A employment estimate, the total civilian labor force will grow about 1.3% from 1987-2000 to a total of 293,928. (See Figure 3.) During that time, the male labor force growth rate will be 0.7%, and the female labor force growth rate will be almost 2%.

The Case B employment estimate calls for the civilian labor force to see an average annual growth rate of about 1.9%, growing to a total of 318,911 in 2000.

The percentage of women in Alaska will continue its rising trend. By 2000, the population will be divided about equally between men and women. (See Figure 4.)

Between 1987 and 2000, more Alaska females are expected to participate in the work force. Their labor force participation rate is projected to climb from 64.4 percent to 67.7 percent. (See Figure 5.) Meanwhile, the male rate is expected to fall from 80.4 percent to 76.5 percent. As a result, women will account for almost 50 percent of the labor force in 2000, up from 45.6 percent in 1987. (See Figure 6.)

The greying of Alaskans will also impact the state's labor force. While the numerically largest age group in the civilian labor force will be those aged 35-44 (93,627), the fastest growing group is that over the age of 44. From 1987 to 2000, the average annual growth rate of workers 45 and older will be about 3.6 percent. (See Figure 7.)

### Predicted Annual Employment Growth Between 1987 & 2000: 1.5%

Under Case A, the state's annual growth rate of its civilian employment between 1987 and 2000 is expected to be 1.5%, bringing the total civilian work force in 2000 to 269,829. (See Figure 8.) Case B, which projects year 2000 employment at 291,341, calls for an annual growth rate of 2.1 percent.

The Case A employment scenario calls for wage and salary employment of 247,300 (see Table 2) and self-employment at 22,529. The Case B employment estimate is composed of wage and salary employment of 267,016 and self-employment at 24,325.

Table 2

Case A

## Wage & Salary Employment by Industry Alaska 1985-2000

| Industry/Year | 1985 | 1986 | 1987 | 1992 | 2000 | Annual Growth Rate [1] |
|---|---|---|---|---|---|---|
| Goods-Producing | 40,815 | 35,913 | 33,08 | 37,615 | 44,424 | 2.29% |
| Agriculture/Forestry/Fishing | 830 | 801 | 810 | 810 | 810 | 0.00 |
| Mining | 9,534 | 9,103 | 8,540 | 10,275 | 14,200 | 3.99 |
| Construction | 18,383 | 13,400 | 10,600 | 11,200 | 12,800 | 1.46 |
| Manufacturing | 12,068 | 12,609 | 13,130 | 15,330 | 16,614 | 1.83 |
| Service-Producing | 189,275 | 184,858 | 176,623 | 182,250 | 202,873 | 1.07 |
| Transporation | 12,529 | 11,977 | 11,880 | 12,300 | 14,507 | 1.55 |
| Communications | 4,285 | 3,960 | 3,800 | 3,900 | 4,100 | 0.59 |
| Public Utilites | 2,014 | 2,000 | 1,950 | 2,000 | 2,100 | 0.57 |
| Wholesale Trade | 8,731 | 7,985 | 7,200 | 7,750 | 9,100 | 1.82 |
| Retail Trade | 37,155 | 35,650 | 33,750 | 35,150 | 40,873 | 1.48 |
| Finance, Ins. & Real Estate | 11,612 | 11,760 | 11,160 | 11,270 | 13,418 | 1.43 |
| Services [2] | 66,042 | 66,071 | 63,283 | 64,980 | 73,775 | 1.19 |
| Federal Government | 17,567 | 18,100 | 18,000 | 19,000 | 19,000 | 0.42 |
| State Government [3] | 15,654 | 15,150 | 14,000 | 14,400 | 14,500 | 0.27 |
| Local Government [4] | 13,686 | 12,205 | 11,600 | 11,500 | 11,500 | 0.07 |
| TOTAL WAGE & SALARY EMPLOYMENT | 230,090 | 220,771 | 209,703 | 219,865 | 247,297 | 1.28% |
| Annual % Change | | -4.05% | -5.01% | 1.29% | 1.48% [5] | |

[1] Annual growth rate, 1987-2000.
[2] Includes University of Alaska and local education.
[3] Excludes University of Alaska.
[4] Excludes local education.
[5] Annual growth rate, 1992-2000.

Source: Alaska Department of Labor, Research & Analysis Section.

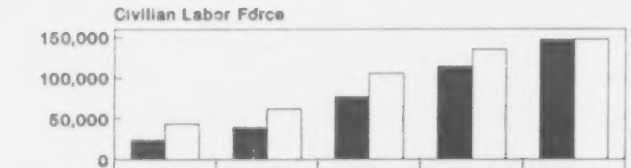
Case A's 1.5% growth rate is roughly in line with the national employment growth rate between 1987 and 2000. But it represents a substantially slower growth for Alaska compared to prior decades. In the 1960s, Alaska's annual employment growth was 4.5%. During the pipeline years of the 1970s, the growth rate rose to 6.2%. Even with the severe recession, the annual employment growth rate was 4.3% between 1980 and 1987.

### Government Spending Will Not Be the Engine of Growth It Has Been

A couple of key factors suggest more moderate employment growth in the future: It's unlikely that state government spending will be the

Figure 6

## Alaska Civilian Labor Force by Sex 1960-2000 Case A




| | 1960 | 1970 | 1980 | 1987 | 2000 |
|---|---|---|---|---|---|
| Female | 23,600 | 38,818 | 76,916 | 114,000 | 146,716 |
| Male | 43,170 | 61,296 | 105,763 | 135,000 | 147,212 |
| Total | 66,770 | 100,114 | 182,679 | 249,000 | 293,928 |
| Pct. Female | 35.3 | 38.8 | 42.1 | 45.6 | 49.9 |

Year

Female  Male

Note: Cases A & B are based on different civilian employment projections.
Sources: U.S. Census Bureau; Alaska Department of Labor, Research & Analysis Section.

*Figure 7*

## Alaska Total Civilian Labor Force by Age 1960-2000

| | 16-19 | 20-24 | 25-44 | 45+ |
|---|---|---|---|---|
| 1960 | 3,770 | 6,101 | 35,541 | 20,120 |
| 1970 | 6,840 | 12,696 | 49,700 | 29,060 |
| 1980 | 13,396 | 26,387 | 103,865 | 39,031 |
| 1987 | 14,000 | 27,000 | 152,000 | 57,000 |
| 2000 | 14,484 | 23,893 | 165,575 | 89,976 |

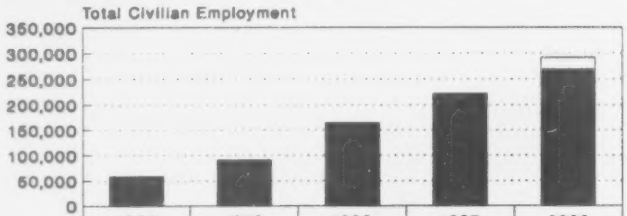
Age Group

1960 1970 1980 1987 2000

Note: Based on Case A estimates.
Sources: U.S. Census Bureau;
Alaska Department of Labor, Research & Analysis Section.

*Figure 8*

## Alaska Civilian Employment 1960-2000 Cases A & B




| | 1960 | 1970 | 1980 | 1987 | 2000 |
|---|---|---|---|---|---|
| Case A | 58,243 | 90,723 | 164,874 | 222,000 | 269,829 |
| Case B | 58,243 | 90,723 | 164,874 | 222,000 | 291,341 |

Year

Case A Case B

Note: Cases A & B employment projections are the bases for population estimates.
Sources: U.S. Census Bureau;
Alaska Department of Labor, Research & Analysis Section.

stimulant it has been in the past without a substantial rise in the price of oil. Short any oil price rise, it's also less likely that a large project, such as a gas pipeline, will materialize between now and 2000. Secondly, concerns about the federal deficit will limit the ability of the federal government to increase its spending in Alaska.

### Employment Growth Less Than Needed; the Result: High Unemployment or Out-migration

Given the severity of the recent Alaska recession, an employment growth rate from 1987 to 2000 amounting to about the same as that of the U.S. is disappointing. Indeed, employment growth in Case A is likely to be less than what will be required to accommodate the rise in the state's labor force. (The number of children aged 3-15 in 1987 amounted to 116,785; of this number, 80,400 will enter the Alaska labor force between 1987 and 2000.)

Further increases in the labor force result from the rising participation rate of women and from the relatively faster growth of older age groups with higher participation rates. These increases are offset some by declines in the participation rate for men.

Case A civilian employment will rise by about 47,800 between 1987 and 2000. The increase under Case B is about 69,300. Neither of these scenarios' employment growth projections will accommodate the rise in the labor force. The result of this disparity can either mean high unemployment, or, more likely, out-migration. Thus, the Case A forecast calls for a net out-migration of 79,700 from 1987 to 2000 (assuming a natural increase [births minus deaths] in population averaging about 9,000 per year). Case B calls for a net out-migration of 33,800.

### Goods-producing Industries Will Fare Better than Service-producing Industries

Favorable foreign exchange rates are expected to have a positive impact on Alaska extractive industries. Tourism also should continue to be an attractive industry. Services and trade should grow about in line with the general economy. Together, these factors should produce an annual growth rate — moderate by historical standards — which is close to a long-term, sustainable rate.

Given the expectation that mining, seafood processing, and timber will do relatively well during the next 13 years, wage and salary employment in goods-producing industries (agriculture, forestry, fisheries, mining, construction and manufacturing) will rise faster than that of service-producing industries. (See Table 3.)

Table 3

## Case A
## Nonfarm Wage & Salary Employment Distribution & Growth
## U.S. & Alaska 1986-2000

| Industry | United States Distribution 1986 | United States Distribution 2000 | United States Growth 1986-2000 1/ | Alaska Distribution 1986 | Alaska Distribution 2000 | Alaska Growth 1986-2000 1/ |
|---|---|---|---|---|---|---|
| Goods-Producing | 24.9% | 20.7% | 0.0% | 15.9% | 17.7% | 1.6% |
| Mining | 0.8 | 0.6 | -0.6 | 4.1 | 5.8 | 3.2 |
| Construction | 5.0 | 4.9 | 1.2 | 6.1 | 5.2 | -0.3 |
| Manufacturing | 19.2 | 15.2 | -0.3 | 5.7 | 6.7 | 2.0 |
| Service-Producing | 75.1 | 79.3 | 1.7 | 84.1 | 82.3 | 0.7 |
| Transportation & Public Utilities | 5.3 | 4.8 | 0.6 | 8.2 | 8.4 | 1.0 |
| Wholesale Trade | 5.8 | 6.1 | 1.7 | 3.6 | 3.7 | 0.9 |
| Retail Trade | 18.0 | 19.1 | 1.7 | 16.2 | 16.6 | 1.0 |
| Finance, Ins. & R.E. | 6.4 | 6.6 | 1.7 | 5.4 | 5.4 | 1.0 |
| Services | 22.7 | 27.3 | 2.7 | 30.0 | 29.9 | 0.8 |
| Government | 16.9 | 15.4 | 0.7 | 20.7 | 18.3 | -0.1 |
| Nonfarm Wage & Salary Employment | 100.0% | 100.0% | 1.3% | 100.0% | 100.0% | 0.8% |

1/ Average annual nonfarm wage and salary employment growth rate from 1986-2000.

Sources: U.S. Bureau of Labor Statistics
Alaska Department of Labor, Research & Analysis Section.

While service-producing industries are growing in importance in the U.S. as a whole, their importance in Alaska has declined between 1986 and today and will continue to decline somewhat between today and 2000. Since the size of government and of service industries were relatively larger in Alaska in 1986 than in the rest of the U.S., their relative decline in Alaska makes the total distribution between goods-producing and service-producing industries more similar to that of the U.S. by the year 2000.

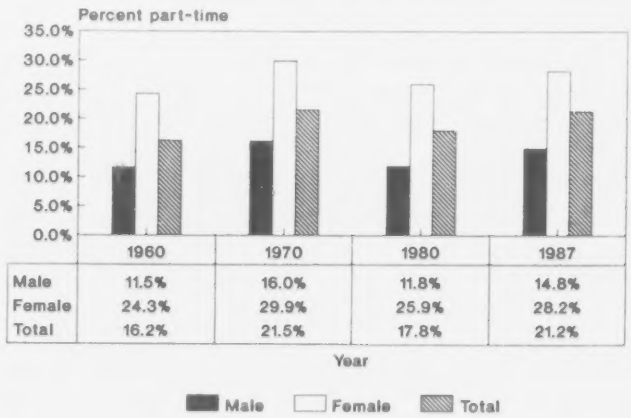
### Employers Will Need to Offer More to Part-time Workers

While employment hasn't been projected by age or sex, it's expected that women will comprise a growing percentage of total employment as their percentage share rises in the total population and labor force.

Most of the Alaska employment gains for men and women have been in full-

Figure 9

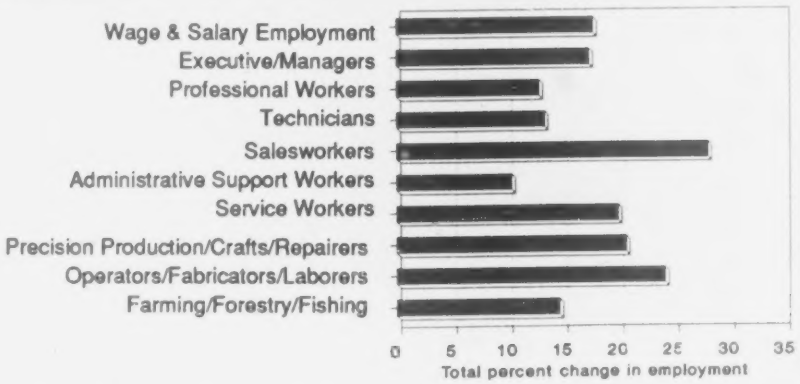
## Ratio of Part-time to Total Employment
## Alaska 1960-1987




Sources: U.S. Census Bureau, Bureau of Labor Statistics.

*Figure 10*

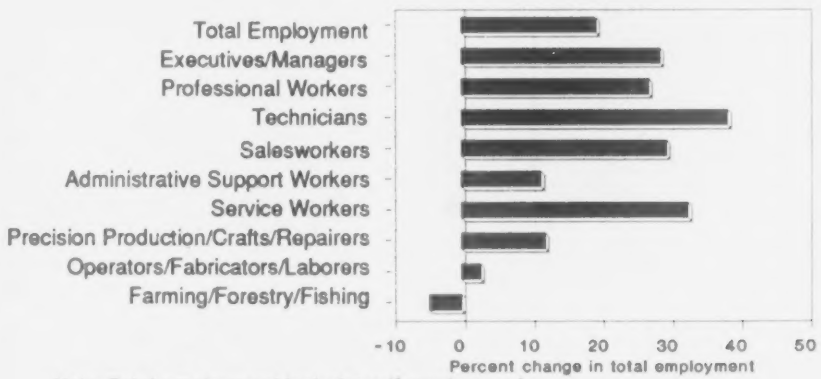
## Wage & Salary Employment Growth by Occupational Category — Alaska 1987-2000




Note: Based on Case A estimates.
Source: Alaska Department of Labor, Research & Analysis Section.

*Figure 11*

## Total Employment Growth by Occupational Category — U.S. 1986-2000




Note: Total employment includes self employment.
Sources: U.S. Bureau of Labor Statistics,
(adjusted by Alaska Department of Labor, Research & Analysis Section).

time employment. This has occurred despite the proliferation of fast-food establishments and the growth of services and retailing businesses, businesses which hire a greater than average share of part-time workers. Recent years' data show, though, that Alaska women have made little headway relative to Alaska men with regard to part-time versus full-time employment. The ratio of part-time to total employment for women hovered around twice the ratio for men from 1960 to 1987. (See Figure 9.) This means that women continue to be twice as likely as men to be employed part-time despite their steady increase in labor force participation.

The teenage labor force is an important source of part-time employment. Over 50% of total teenage employment is part-time.

With a declining percentage of the labor force consisting of those aged 16-24, employers may have more difficulty, especially in the near term, of filling part-time jobs. Employers may find it necessary to offer enhanced wages or benefits in order to attract women who want to work part time or to persuade older people to come out of retirement. As the population continues to age beyond the year 2000, older workers likely will play a greater role in part-time employment. Employers will have to use different incentives to attract women and older workers than they have used to attract teenage workers.

### Occupational Outlook for Alaska Different from that of U.S. as a Whole

Differences between Alaska industry growth rates and those of the U.S. as a whole produce distinctions in growth rates of various occupations. In Alaska, from 1987 to 2000, the top three occupational categories sustaining the greatest percentage growth in employment are salesworkers (28%), operators/fabricators/laborers (24.1%), and precision production/crafts/repairers (20.6%). (See Figure 10.) By contrast, in the U.S. from 1986 to 2000, the latter two occupational categories will grow at below average rates — 2.7% and 12%, respectively. (See Figure 11.)

Alaskan executives and managers, professional workers, and technicians will comprise a slightly smaller percentage of wage and salary employment in 2000 compared to 1987. Nationally, between 1986 and 2000, it is projected that these occupations will increase their percentage of total employment.

The apparent cause of the differences between the occupational profiles of the U.S. and Alaska is the relatively larger role of government employment in Alaska, and the relatively smaller role of manufacturing in this state. These differences are consistent with the state's higher concentration of

executives and managers, administrative support workers, technicians, and professional workers, and the lower percentage of operators/fabricators/laborers. The latter category was hard hit by the recession of 1986-88.

### Fastest Growing Alaska Occupations Related to Mining

The cliche, 'the more things change, the more they stay the same' applies to the 10 largest occupations in 2000. With slight revisions, the 10 largest occupations are the same as the top 10 of 1987. (See Figure 12.)

Comparing the 10 fastest growing occupations in Alaska with those of the U.S. as a whole, the national list is dominated by health care and technical occupations. (See Figure 13.) The Alaska list, on the other hand, is dominated by occupations in the mining industry. (See Figure 14.)

But occupations that grow rapidly often are those whose total employment numbers are small, since small changes in employment can produce large percentage changes. Annual openings in an occupation may come from growth or from 'separations'. (The word 'separations' is defined as openings created by the death or retirement of a person in the occupation.) Growth occurs over time as new positions are created by expansion of the occupation.

An analysis of the 10 fastest growing occupations which also produce 100-plus annual openings shows that seven of the ten are also on the list of the 10 largest occupations. (See Figure 15.) The greatest number of employment opportunities are more associated with large occupations than with fast-growing occupations.

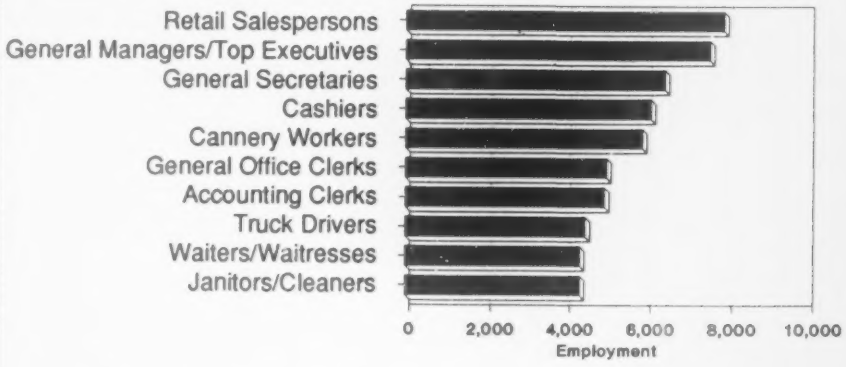
### Disparity Remains Between Occupations Filled by Women and Men

In 1987, there was a significant disparity between the male and female employment distribution of occupations, according to 1987 Current Population Survey (CPS) data. Managers and professional categories comprised a similar percentage of male and female employment. But administrative support workers accounted for 28.2% of female employment and only 5.6% of male employment. Also, precision production/crafts/repairs occupations accounted for 20.7% of male employment and 1.2% of female employment. The operators/fabricators/laborers occupations were 15.8% male, and 3.8% female employment.

Women will find it more difficult to increase their share of employment without making in-roads in male-dominated occupational categories considering the projected growth of these occupational categories between 1987 and 2000. Noteworthy, though, is the fact that the male/female differences in the occupational profiles helped women in Alaska's most recent recession. The male-dominated occupations and industries were hit relatively harder by the recession than were the female-dominated occupations and industries.

*Figure 12*

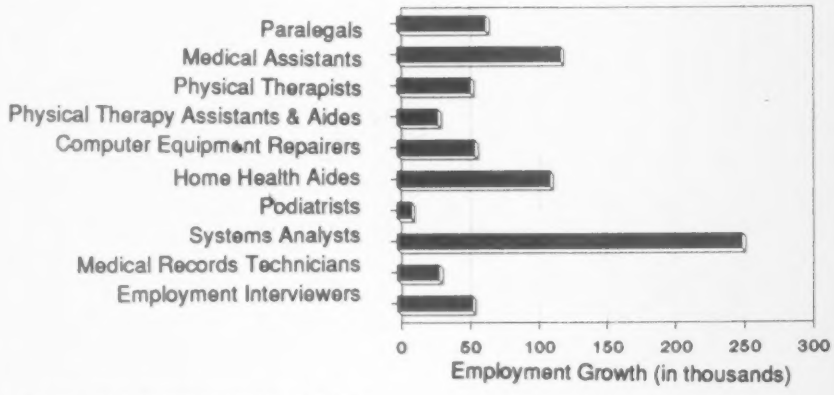
**Top 10 Occupations in Year 2000**
**Alaska Wage & Salary Employment**




Source: Alaska Department of Labor, Research & Analysis Section.

*Figure 13*

**Occupations with the Fastest Percentage Growth**
**U.S. 1986-2000**




Source: U.S. Bureau of Labor Statistics.

Table 4

## Case A
## Employment by Broad Occupational Group & Level of Educational Attainment
## Alaska 1987-2000
## United States 1986-2000

| | Alaska [1] | | United States [2] | |
|---|---|---|---|---|
| | 1987 | 2000 | 1986 | 2000 |
| Group I Total | 30.0% | 29.1% | 25.1% | 27.2% |
| Management & Management-related Workers | 10.4 | 10.4 | 9.6 | 10.3 |
| Engineers, Architects & Surveyors | 1.7 | 1.9 | 1.4 | 1.6 |
| Natural Scientists & Computer Specialists | 1.3 | 1.3 | 0.7 | 0.8 |
| Teachers, Librarians & Counselors | 7.1 | 6.3 | 4.5 | 4.3 |
| Health Diagnosing & Treating Specialists | 1.8 | 1.9 | 2.3 | 2.8 |
| Other Professional Specialists | 2.8 | 2.7 | 3.3 | 3.5 |
| Technicians | 4.9 | 4.7 | 3.3 | 3.8 |
| Group II Total | 41.1 | 40.9 | 41.6 | 40.6 |
| Marketing & Salesworkers | 9.2 | 10.0 | 11.4 | 12.4 |
| Administrative Support Workers (including Clerical) | 20.0 | 18.8 | 17.9 | 16.7 |
| Blue collar Worker Supervisors | 1.5 | 1.6 | 1.6 | 1.5 |
| Construction Trades & Extractive Workers | 3.4 | 3.5 | 3.6 | 3.6 |
| Mechanics & Repairers | 5.4 | 5.4 | 4.2 | 4.1 |
| Precision Production & Plant Systems Workers | 1.5 | 1.6 | 2.8 | 2.4 |
| Group III Total | 29.0 | 29.9 | 33.3 | 32.2 |
| Service Workers (excluding Private Household Workers) | 15.2 | 15.5 | 15.0 | 16.6 |
| Agriculture, Forestry & Fishing Workers | 0.9 | 0.9 | 3.2 | 2.6 |
| Machine Setters & Operators | 0.8 | 0.8 | 4.5 | 3.6 |
| Assemblers & Other Hand Workers | 2.9 | 3.2 | 2.4 | 2.0 |
| Transportation & Material Moving Workers | 5.5 | 5.7 | 4.3 | 4.0 |
| Helpers & Laborers | 3.7 | 3.8 | 3.9 | 3.4 |
| TOTAL ALL GROUPS | 100.0% | 100.0% | 100.0% | 100.0% |

[1] Wage and salary employment only.
[2] Total employment (excluding private household workers).

Note: Columns may not add due to rounding.

Sources: U.S. Bureau of Labor Statistics (U.S. data);
Alaska Department of Labor, Research & Analysis Section.

### Alaska Jobs Will Remain Available to High School Graduates

When occupations are grouped by broad categories of educational attainment, the profile of Alaska occupations in 2000 turns out to be no dramatically different from the 1987 profile. (One group — Group I in Table 4 — includes occupational categories in which at least two-thirds of 1986 workers had one or more years of college. Another group — Group II in Table 4 — includes categories in which the median years of school completed was 12, and the proportion of those with less than a high school education was low. A third group — Group III in Table 4 — includes categories in which more than 30% of the workers had less than a high school education.)

While the national profile of total employment (including self-employment) shows a trend toward requiring more education and training, this trend doesn't appear to hold for Alaska. Since the Alaska profile excludes self-employment, the executive and professional categories may be understated, making comparisons with the U.S. more

difficult. However, the differences in the industry growth rates between Alaska and the U.S. are consistent with a divergence in the trends toward required education.

This doesn't mean that education is unimportant in Alaska. For example, grouping occupations by current educational attainment ignores the possibility that educational requirements of various occupations will change over time. This analysis simply suggests that there will continue to be a demand in Alaska for workers with a diverse set of educational backgrounds, including high school, college, and vocational education.

### Some Implications for the Future

The aging of the population will give Alaska an older, more experienced and more productive population from which to draw its labor force.

A slower rate of population growth will mean less pressure on the economy to create jobs. Further, it will mean that industry will look to labor saving types of investment. This, in turn, will increase labor productivity.

The relative growth of the most productive part of the population during the forecast period implies that there will be a larger percentage of people to shoulder the costs associated with the very young and the older components of the population (such as costs of education and health care).

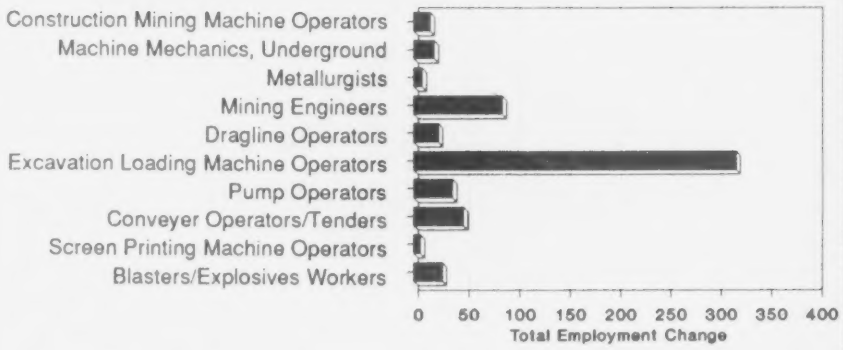
The increasing importance of women in the labor force should continue to focus concern on issues generally identified as important to women. These issues include equal opportunity and pay, sexual harassment, day care, flexible work hours, and health benefits. Some employers already are allowing employees to work part time for a few years when children are young; the employers aren't requiring them at the same time to climb off of the corporate promotion ladder.

Equal opportunity and discrimination based on age, origin, and race will continue to be important issues as a result of the aging of the population and work force. At the same time, employers will have more incentive to eliminate discrimination in order to compete effectively for workers. This is because most of the labor force growth will be among older workers, among minorities, and among women.

Additionally, employers may have to become more flexible in their staffing decisions in order to attract older workers. Job sharing and part-time work may have to rise in order to attract and keep workers in the older age groups. Retirement benefits and health care will be an increasingly important issue for employers and workers alike, especially when they view the next 20-year outlook in the year 2000.

Figure 14

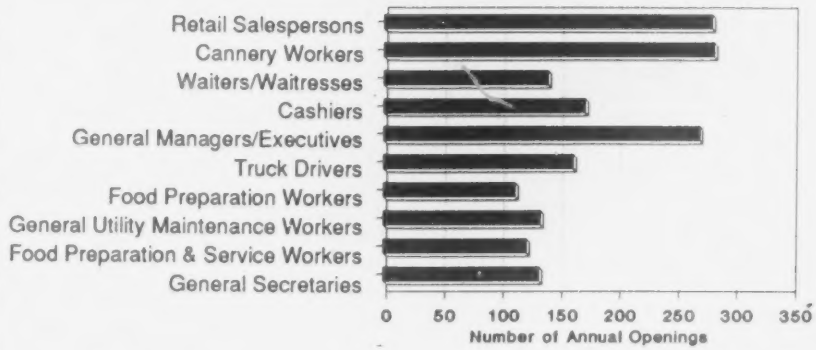
**Ten Fastest Growing Occupations Alaska 1987-2000**




Note: Growth defined as percentage change.
Source: Alaska Department of Labor, Research & Analysis Section.

Figure 15

**Occupations with Fastest Growth Rates and 100+ Annual Openings — Alaska 1987-2000**




Source: Alaska Department of Labor, Research & Analysis Section.

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# Employment Prospects in June Were the Best Ever for Job Searchers

By Brian N. Rae

Stability is not a word often associated with the Alaskan economy. After nearly two decades of roller coaster performances, there was the possibility that the state's economy might settle down to a period of relatively stable growth. At least, that is what most of the economic indicators suggested.

Once again, outside forces have knocked the state's economy off the slow but steady growth track. The impact of the Exxon Valdez oil spill on Alaska's economy will be very short lived and disruptive.

Employment gains and the decline in the unemployment rate caused by the Exxon Valdez cleanup efforts won't last forever. The benefits of increased employment will be followed by an economic downturn as the cleanup winds down. Separating the growth which would have occurred without the cleanup effort from that caused by the spill is difficult, but determining the impact is not: Alaska's labor market is, at least at this moment, one of the best ever for job seekers.

## Alaskans' Personal Income Growing, But Not as Fast as Other Americans

Data recently released by the Bureau of Economic Analysis show that Alaska's nonfarm personal income rose 7.2% (in current dollars, not adjusted for inflation) between the first quarters of 1988 and 1989. This rate of growth is better than the period between the 3rd quarter of 1982 and the 1st quarter of 1988 when Alaska's nonfarm personal income rose at an annual rate of 3.4%. (See Table 1.)

Still, neither rate is above the national averages of 9.4% (for the 1st quarters of 1988 and 1989) and 7.2% (for the 3rd quarter of 1982 through the 1st quarter of 1988). Nor is either Alaska rate better than the other Pacific Coast states. In fact, Alaska's one-year increase ranked 46th among all states. Alaska posted larger than average gains over the past year in only two industries, mining and nondurables manufacturing (the latter industry being dominated by seafood processing); from the 3rd quarter of 1982 through the 1st quarter of 1988 mining was the only industry to have its personal income level rise higher than that of the national average.

Several reasons could account for this comparatively poor performance. First, Alaska has consistently been at or near the top in per capita personal income. (Per capita personal income is defined by: personal income divided by the population of the state.) This is because Alaska wages and salaries are generally higher than the national average. Starting from this position near the top, it's no surprise that Alaska wouldn't have as high a percentage increase as most other states.

Table 1

## Percentage Change in Total Nonfarm Personal Income
## 1st Quarter 1988 to 1st Quarter 1989

| | Alaska | California | Washington | Oregon | U.S. |
|---|---|---|---|---|---|
| Nonfarm Personal Income | 7.2 | 10.7 | 9.2 | 8.9 | 9.4 |
| Durables Manufacturing 1/ | 2.6 | 7.5 | 12.3 | 3.7 | 7.2 |
| Nondurables Manufacturing | 9.7 | 10.6 | 4.9 | 3.5 | 6.7 |
| Construction | 5.5 | 11.4 | 12.7 | 22.9 | 11.6 |
| Mining | 19.5 | -2.2 | 12.0 | 1.9 | 3.8 |
| Private Service 2/ | 6.8 | 11.8 | 9.5 | 13.5 | 12.0 |
| Government | 3.8 | 7.2 | 8.4 | 7.0 | 6.7 |
| Rank | 46 | 3 | 19 | 29 | n/a |

## Percentage Change in Total Nonfarm Personal Income
## 3rd Quarter 1982 to 1st Quarter 1988

| | Alaska | California | Washington | Oregon | U.S. |
|---|---|---|---|---|---|
| Nonfarm Personal Income | 3.4 | 8.4 | 6.9 | 6.3 | 7.2 |
| Durables Manufacturing 1/ | 3.4 | 6.8 | 5.2 | 6.4 | 5.4 |
| Nondurables Manufacturing | 4.8 | 6.5 | 5.7 | 5.0 | 5.3 |
| Construction | -14.0 | 11.1 | 2.6 | 6.5 | 7.8 |
| Mining | 1.5 | 0.7 | 5.8 | -0.9 | -4.4 |
| Private Service 2/ | 0.5 | 9.6 | 7.6 | 7.0 | 8.7 |
| Government | 4.4 | 7.3 | 6.2 | 5.3 | 6.6 |
| Rank | 47 | 14 | 23 | 28 | n/a |

1/ "Durables" are products with a life expectancy greater than three years.

2/ Private services includes the wholesale and retail trade, FIRE, TCU and services industries.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Second, as the cost of living in Alaska converges with that of the Lower '49 states, there is less pressure to increase Alaska wages at the national rate. Inflation as measured by the Consumer Price Index has been much less in Anchorage (the only Alaskan city in the CPI) than the U.S. average. The lower the rate of inflation, the smaller the wage increase needed to maintain a certain standard of living.

Finally, the time period between the 3rd quarter of 1982 through the 1st quarter of 1988 was not one of steady economic growth. Although personal income rose at an annual rate of 3.4%, this rate doesn't reflect the rapid economic climb and more rapid descent which occurred during this period.

Table 2

## Nonagricultural Wage and Salary Employment By Place of Work

### Alaska

| | p/ 6/89 | r/ 5/89 | Changes from: 6/88 | 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 231,500 | 221,300 | 221,900 | 10,200 | 9,600 |
| Mining | 10,900 | 10,400 | 10,400 | 500 | 500 |
| Construction | 10,000 | 8,400 | 9,900 | 1,600 | 100 |
| Manufacturing | 18,000 | 14,100 | 18,100 | 3,900 | -100 |
| Seafood Processing | 10,400 | 6,900 | 10,500 | 3,500 | -100 |
| Lumber & Paper Products | 4,000 | 3,800 | 4,000 | 200 | 0 |
| All Other Manufacturing | 3,600 | 3,400 | 3,600 | 200 | 0 |
| Trans., Comm. & Utilities | 24,100 | 22,000 | 18,300 | 2,100 | 5,800 |
| Trucking & Warehousing | 2,400 | 2,400 | 2,300 | 0 | 100 |
| Water Transportation | 6,600 | 5,400 | 1,100 | 1,200 | 5,500 |
| Air Transportation | 6,100 | 5,600 | 5,800 | 500 | 300 |
| Communications | 3,200 | 3,200 | 3,300 | 0 | -100 |
| All Other Transportation | 5,800 | 5,400 | 5,800 | 400 | 0 |
| Trade | 45,300 | 43,300 | 44,300 | 2,000 | 1,000 |
| Wholesale | 8,200 | 7,700 | 7,800 | 500 | 400 |
| Retail | 37,100 | 35,600 | 36,500 | 1,500 | 600 |
| General Merch. & Apparel | 5,400 | 5,100 | 5,000 | 300 | 400 |
| Food Stores | 6,500 | 6,400 | 6,400 | 100 | 100 |
| Eating & Drinking Places | 14,000 | 13,300 | 13,900 | 700 | 100 |
| All Other Retail | 11,200 | 10,800 | 11,200 | 400 | 0 |
| Finance, Ins. & Real Estate | 10,600 | 10,500 | 10,800 | 100 | -200 |
| Services | 46,000 | 44,200 | 45,100 | 1,800 | 900 |
| Hotels & Other Lodging | 5,800 | 4,700 | 5,700 | 1,100 | 100 |
| Government | 66,600 | 68,400 | 65,000 | -1,800 | 1,600 |
| Federal | 18,500 | 17,900 | 18,300 | 600 | 200 |
| State | 19,800 | 19,700 | 18,500 | 100 | 1,300 |
| Local | 28,300 | 30,800 | 28,200 | -2,500 | 100 |

Notes: Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1988

p/ denotes preliminary estimates
r/ denotes revised estimates

Source: Alaska Department of Labor, Research & Analysis.

### Gulf Coast Region Leads the Employment Charge for June

The Gulf Coast Region led the charge in over-the-year employment gains; from June 1988, the region's employment was up by more than 25%. (See Table 3.) The Transportation, Communications and Utilities (TCU) sector showed the largest gains with levels over 10 times those of one year ago. (Oil spill cleanup workers are included in the water transportation industry classification.) Unemployment rates for the region were down to 6.3% in June, compared with 8% in May 1989 and 10.7% in June of last year. Both the Kodiak Island Borough and the Valdez-Cordova Census Area recorded rates well below this (3.2% and 4.5%, respectively). (See Table 5.)

Service sector industries in the Gulf Coast also showed strong growth, much of it attributable to oil spill activities. Certain secondary activities, such as clerical support and animal rescue and rehabilitation activities, are classified in the services sector. Employment rose over 10% for the year, and was up nearly 8% for the month. Retail and wholesale trade industries both posted increases, with combined employment nearly 5% above one year ago.

Other private sector industries didn't fare as well in the region. Although they did gain over the month, the construction and manufacturing sectors' employment levels were below year ago levels. FIRE (Fire, Insurance and Real Estate) sector employment remained unchanged for both the month and year.

In the public sector, state government showed the largest gains; employment was up more than 15% compared to year ago levels. Local government employment was down slightly compared to May, but its numbers were still nearly 3% above its year ago levels. Overall, government employment in the Gulf Coast Region was up by 350 jobs for the year.

### Anchorage/MatSu and Interior Regions Follow Gulf Coast's Lead

The Anchorage/MatSu Region was also affected by cleanup related employment gains. Although the water transportation industry showed a healthy increase in June — up 250 from last year — cleanup employment gains were spread among more industries than just those in the Gulf Coast Region. The sheer size of the Anchorage/MatSu economy renders it difficult to attribute indirect employment growth to the cleanup effort. But the fact that Anchorage served as a supply and logistical center for cleanup operations undoubtedly affected the region's employment levels. All of the region's 1989 monthly employment estimates have been higher than comparable levels in 1988. That's good news for one of the regions hit hardest by the recent recession.

Changes in the Anchorage/MatSu Region unemployment rate are easier to detect. The unemployment rate dropped to 6.4% for June. The region saw in June a rise in employment, which helped lower the unemployment rate. At the same time, many formerly unemployed workers found oil spill jobs. This created a June unemployment rate that came in lower by two percentage points compared to the rate of one year ago. While some improvement must be attributed to a generally healthier economy, the cleanup activities also played a role.

Other regions less affected by the spill were still posting sound employment gains. The Interior Region showed a near 5% employment rise over the May level; this rise was facilitated mainly by healthy gains in construction, TCU, trade, and service sector industries. The region's unemployment rate, 9.3%, was nearly three percentage points below that of last year.

Current labor supplies in areas located miles from the spill are much smaller than in prior years, and many employers are experiencing difficulty filling lower paid positions. Several factors have combined to cause this. First, many people left the state in recent years. Second, unlike the trend of prior years, many seasonal jobs haven't been filled by Lower '49 workers. A strengthened U.S. economy has dissuaded many of these workers from traveling to Alaska to look for seasonal work. Finally, many seasonal Alaska workers and others in lower paid jobs were able to get jobs cleaning up the spill.

### This Year's Statewide Construction Pace Up Over 1988 Levels (Finally)

When reviewing employment estimates for the different industries in June, one very small increase screams out for attention. Finally, after many months of over-the-year declines, the construction sector posted higher employment levels in June 1989 than last June. (See Table 2.) Obviously, one incremental gain does not a turnaround make, but any increase in this industry is encouraging.

The fact that much of the construction employment is concentrated in larger projects — like the Red Dog mine, Bradley Lake, military construction in Fairbanks, and pipeline repair work — doesn't lessen the importance of these employment gains. Alaska's construction industry has always relied heavily on large projects, and others will probably come along before these are completed. Bradley Lake, if completed on schedule, will bolster construction employment through September 1991. Maintenance and improvement projects on the TransAlaska Pipeline will also continue for several years. In 1989, $78 million in pipeline projects were authorized calling for the employment of about 500 workers.

The recent appropriation of $132 million for the state capital construction budget is another plus for the industry. When combined with federal and other funds, the total spending package will be over $343 million. Last year's capital budget was about the same — $352 million; $127 million of that was state-funded. Road and highway improvements will account for about $120 million of the capital budget this year, with $56.7 million going to the Southcentral Region, $35.6 million to the Northern Region, and $8 million to Southeast Alaska. An additional $17 million is earmarked for the Alaska Marine Highway System.

### Water Transportation Still Posting Largest Gains

Once again, the Transportation, Communications and Utilities (TCU) sector posted the largest gains of any industry group. The gains were fueled by the oil spill cleanup efforts. Statewide, the water transportation sector posted a sixfold increase over its level of just one year ago. Even though the mobilization of workers was well underway in May, June employment increased over 20% from the May levels.

Events other than the Exxon Valdez spill have bolstered TCU sector employment numbers. One of the largest impactors, and the one most in doubt just a few months ago, is the seasonal influx of tourists to the state. The 1989 tourist season appears to have started off well despite the fact that some visitors cancelled their Alaska vacation plans due to oiled beaches and a wintry cold snap. Employment numbers were up strong over the month in both local passenger transportation and in transportation service industries.

### Tourism Helped Boost Service Sector

Tourism also positively affected service sector industries during the month of June. Employment in hotels and motels was up sharply, having increased nearly 25% over May levels. Although the number of ships visiting Alaska has been down from last year, the percentage of cabins filled has been near capacity. And while some hotels and motels report a decreased number of stays from last year, others seem to be having their best year yet. Some cities are reporting an increased number of independent and return travelers. As cruise ship companies venture further north and west, tourists' dollars will be spread thinner over a larger area. This trend may hurt some smaller communities if tours hit only those spots of special interest to their customers.

Overall, the services sector has grown about 2% for the year; meanwhile, though, business and personal services industries have grown by 6%. This may serve as an indication of the strengthening of the entire economy.

Table 3

# Nonagricultural Wage and Salary Employment By Place of Work

## Anchorage Borough

| | p/ 6/89 | r/ 5/89 | 6/88 | Changes from: 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 104,450 | 102,050 | 102,650 | 2,400 | 1,800 |
| Mining | 3,800 | 3,700 | 3,450 | 100 | 350 |
| Construction | 4,650 | 3,750 | 4,750 | 900 | -100 |
| Manufacturing | 3,300 | 2,700 | 3,300 | 600 | 0 |
| Trans., Comm. & Utilities | 9,950 | 9,650 | 9,500 | 300 | 450 |
| Trucking & Warehousing | 1,500 | 1,550 | 1,300 | -50 | 200 |
| Water Transportation | 550 | 500 | 300 | 50 | 250 |
| Air Transportation | 3,500 | 3,350 | 3,550 | 150 | -50 |
| Communications | 1,800 | 1,800 | 1,800 | 0 | 0 |
| All Other Transportation | 2,600 | 2,450 | 2,550 | 150 | 50 |
| Trade | 25,500 | 25,100 | 24,800 | 400 | 700 |
| Wholesale | 6,000 | 5,950 | 5,700 | 50 | 300 |
| Retail | 19,500 | 19,150 | 19,100 | 350 | 400 |
| General Merch. & Apparel | 2,550 | 2,450 | 2,500 | 100 | 50 |
| Food Stores | 3,200 | 3,100 | 3,000 | 100 | 200 |
| Eating & Drinking Places | 7,850 | 7,800 | 7,750 | 50 | 100 |
| All Other Retail | 5,900 | 5,800 | 5,850 | 100 | 50 |
| Finance, Ins. & Real Estate | 6,900 | 6,900 | 7,200 | 0 | -300 |
| Services | 25,450 | 24,850 | 24,950 | 600 | 500 |
| Government | 24,900 | 25,400 | 24,700 | -500 | 200 |
| Federal | 10,150 | 9,900 | 10,350 | 250 | -200 |
| State | 6,800 | 6,850 | 6,450 | -50 | 350 |
| Local | 7,950 | 8,650 | 7,900 | -700 | 50 |

## Fairbanks North Star Borough

| | p/ 6/89 | r/ 5/89 | 6/88 | Changes from: 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 27,150 | 26,100 | 26,450 | 1,050 | 700 |
| Mining | 200 | 150 | 200 | 50 | 0 |
| Construction | 1,850 | 1,500 | 1,750 | 350 | 100 |
| Manufacturing | 650 | 600 | 650 | 50 | 0 |
| Trans., Comm. & Utilities | 2,200 | 1,900 | 2,000 | 300 | 200 |
| Trucking & Warehousing | 450 | 400 | 400 | 50 | 50 |
| Air Transportation | 350 | 300 | 300 | 50 | 50 |
| All Other Transportation | 1,400 | 1,200 | 1,300 | 200 | 100 |
| Trade | 6,450 | 6,000 | 6,350 | 450 | 100 |
| Wholesale | 750 | 750 | 750 | 0 | 0 |
| Retail | 5,700 | 5,250 | 5,600 | 450 | 100 |
| Food Stores | 800 | 750 | 800 | 50 | 0 |
| All Other Retail | 4,900 | 4,500 | 4,800 | 400 | 100 |
| Finance, Ins. & Real Estate | 800 | 750 | 800 | 50 | 0 |
| Services | 5,950 | 5,700 | 6,000 | 250 | -50 |
| Government | 9,050 | 9,500 | 8,700 | -450 | 350 |
| Federal | 2,900 | 2,900 | 2,800 | 0 | 100 |
| State | 3,700 | 3,900 | 3,500 | -200 | 200 |
| Local | 2,450 | 2,700 | 2,400 | -250 | 50 |

## Anchorage-MatSu Region

| | p/ 6/89 | r/ 5/89 | 6/88 | Changes from: 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 111,100 | 108,500 | 109,150 | 2,600 | 1,950 |
| Mining | 3,800 | 3,750 | 3,450 | 50 | 350 |
| Construction | 4,850 | 4,000 | 4,950 | 850 | -100 |
| Manufacturing | 3,450 | 2,800 | 3,450 | 650 | 0 |
| Trans., Comm. & Utilities | 10,700 | 10,400 | 10,050 | 300 | 650 |
| Trade | 26,850 | 26,350 | 26,400 | 500 | 450 |
| Finance, Ins. & Real Estate | 7,350 | 7,250 | 7,600 | 100 | -250 |
| Services | 26,600 | 25,850 | 26,200 | 750 | 400 |
| Government | 27,500 | 28,100 | 27,050 | -600 | 450 |

## Interior Region

| | p/ 6/89 | r/ 5/89 | 6/88 | Changes from: 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 31,300 | 29,950 | 30,800 | 1,350 | 500 |
| Mining | 350 | 350 | 350 | 0 | 0 |
| Construction | 1,950 | 1,600 | 1,850 | 350 | 100 |
| Manufacturing | 650 | 600 | 700 | 50 | -50 |
| Trans., Comm. & Utilities | 2,600 | 2,250 | 2,500 | 350 | 100 |
| Trade | 6,900 | 6,350 | 6,800 | 550 | 100 |
| Finance, Ins. & Real Estate | 850 | 800 | 900 | 50 | -50 |
| Services | 6,600 | 6,250 | 6,650 | 350 | -50 |
| Government | 11,400 | 11,750 | 11,050 | -350 | 350 |

Notes: Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1988 p/ denotes preliminary estimates r/ denotes revised estimates

Source: Alaska Department of Labor, Research & Analysis.

(cont. on page 17)

# Nonagricultural Wage and Salary Employment By Place of Work

## Southeast Region

| | p/ 6/89 | r/ 5/89 | Changes from: 6/88 | 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 33,550 | 31,850 | 32,450 | 1,700 | 1,100 |
| Mining | 300 | 250 | 200 | 50 | 100 |
| Construction | 1,300 | 1,200 | 1,100 | 100 | 200 |
| Manufacturing | 5,650 | 4,950 | 5,750 | 700 | -100 |
| Seafood Processing | 1,650 | 1,200 | 1,550 | 450 | 100 |
| Lumber & Paper Products | 3,750 | 3,500 | 3,900 | 250 | -150 |
| All Other Manufacturing | 250 | 250 | 300 | 0 | -50 |
| Trans., Comm. & Utilities | 2,600 | 2,300 | 2,600 | 300 | 0 |
| Trade | 5,400 | 5,100 | 5,100 | 300 | 300 |
| Wholesale | 500 | 500 | 450 | 0 | 50 |
| Retail | 4,900 | 4,600 | 4,650 | 300 | 250 |
| Finance, Ins. & Real Estate | 1,050 | 1,000 | 1,050 | 50 | 0 |
| Services | 5,550 | 5,150 | 5,250 | 400 | 300 |
| Government | 11,700 | 11,900 | 11,400 | -200 | 300 |
| Federal | 2,100 | 2,000 | 2,100 | 100 | 0 |
| State | 5,450 | 5,350 | 5,100 | 100 | 350 |
| Local | 4,150 | 4,550 | 4,200 | -400 | -50 |

## Southwest Region

| | p/ 6/89 | r/ 5/89 | Changes from: 6/88 | 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 14,700 | 13,600 | 14,200 | 1,100 | 500 |
| Seafood Processing | 3,950 | 2,700 | 3,850 | 1,250 | 100 |
| All Other Private | 4,900 | 4,500 | 4,800 | 400 | 100 |
| Government | 5,850 | 6,400 | 5,550 | -550 | 300 |
| Federal | 1,350 | 1,300 | 1,300 | 50 | 50 |
| State | 550 | 600 | 450 | -50 | 100 |
| Local | 3,950 | 4,500 | 3,800 | -550 | 150 |

## Gulf Coast Region

| | p/ 6/89 | r/ 5/89 | Changes from: 6/88 | 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 27,400 | 24,500 | 21,650 | 2,900 | 5,750 |
| Mining | 850 | 850 | 850 | 0 | 0 |
| Construction | 900 | 800 | 950 | 100 | -50 |
| Manufacturing | 4,000 | 2,950 | 4,300 | 1,050 | -300 |
| Seafood Processing | 3,300 | 2,250 | 3,650 | 1,050 | -350 |
| All Other Manufacturing | 700 | 700 | 650 | 0 | 50 |
| Trans., Comm. & Utilities | 6,650 | 5,650 | 1,550 | 1,000 | 5,100 |
| Trade | 4,250 | 3,900 | 4,050 | 350 | 200 |
| Wholesale | 700 | 600 | 650 | 100 | 50 |
| Retail | 3,550 | 3,300 | 3,400 | 250 | 150 |
| Finance, Ins. & Real Estate | 550 | 550 | 550 | 0 | 0 |
| Services | 4,300 | 4,000 | 3,850 | 300 | 450 |
| Government | 5,900 | 5,800 | 5,550 | 100 | 350 |
| Federal | 600 | 550 | 600 | 50 | 0 |
| State | 1,850 | 1,750 | 1,600 | 100 | 250 |
| Local | 3,450 | 3,500 | 3,350 | -50 | 100 |

## Northern Region

| | p/ 6/89 | r/ 5/89 | Changes from: 6/88 | 5/89 | 6/88 |
|---|---|---|---|---|---|
| Nonag. Wage & Salary | 14,150 | 13,450 | 13,850 | 700 | 300 |
| Mining | 5,550 | 4,850 | 5,600 | 700 | -50 |
| All Other Private | 4,250 | 4,150 | 3,900 | 100 | 350 |
| Government | 4,350 | 4,450 | 4,350 | -100 | 0 |
| Federal | 400 | 350 | 400 | 50 | 0 |
| State | 300 | 350 | 300 | -50 | 0 |
| Local | 3,650 | 3,750 | 3,650 | -100 | 0 |

Notes: Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1988 p/ denotes preliminary estimates r/ denotes revised estimates

Source: Alaska Department of Labor, Research & Analysis.

Table 4

## Alaska Hours and Earnings for Selected Industries [1/2]

| | Average Weekly Earnings | | | Average Weekly Hours | | | Average Hourly Earnings | | |
|---|---|---|---|---|---|---|---|---|---|
| | p/ 6/89 | r/ 5/89 | 6/88 | p/ 6/89 | r/ 5/89 | 6/88 | p/ 6/89 | r/ 5/89 | 6/88 |
| Mining | $1,032.90 | $1,050.67 | $1,205.89 | 47.1 | 47.2 | 51.6 | 21.93 | 22.26 | 23.37 |
| Construction | 1,177.24 | 1,102.87 | 1,020.82 | 47.7 | 46.3 | 43.0 | 24.68 | 23.82 | 23.74 |
| Manufacturing | 487.68 | 590.18 | 518.46 | 38.4 | 46.0 | 43.9 | 12.70 | 12.83 | 11.81 |
| Seafood Processing | 330.94 | 434.15 | 369.90 | 35.7 | 48.4 | 45.0 | 9.27 | 8.97 | 8.22 |
| Lumber & Paper Products | 748.66 | 781.14 | 688.33 | 46.1 | 47.0 | 42.1 | 16.24 | 16.62 | 16.35 |
| Trans., Comm. & Utilities | 607.76 | 598.89 | 578.89 | 38.2 | 36.9 | 36.5 | 15.91 | 16.23 | 15.86 |
| Trade | 389.66 | 389.88 | 378.22 | 35.2 | 34.2 | 33.8 | 11.07 | 11.40 | 11.19 |
| Wholesale | 547.47 | 523.26 | 543.82 | 39.5 | 38.0 | 38.9 | 13.86 | 13.77 | 13.98 |
| Retail | 335.99 | 346.17 | 322.60 | 33.7 | 33.0 | 32.1 | 9.97 | 10.49 | 10.05 |
| Finance, Ins. & R.E. | 420.00 | 408.61 | 387.38 | 37.4 | 35.5 | 34.1 | 11.23 | 11.51 | 11.36 |

Notes: p/ denotes preliminary estimates r/ denotes revised estimates Benchmark: March 1988

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Excludes eating and drinking establishments.

Averages are based on data for full- and part-time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

The trade sector also showed its normal seasonal increase in June, up nearly 5% from May levels, and up over 2% from June 1988 levels. The largest gains were posted in wholesale trade and in the general merchandise and apparel portions of retail trade.

### Finance Sector Continues its Restructuring

Whether it was the construction or the FIRE sector that was hurt most during the recession is open to debate. Although June FIRE employment estimates were again lower than those of one year ago, there is some good news in the industry. Key Bank has become an aggressive player in Alaska, buying Juneau-based B.M. Behrends Bank and opening a new branch in Palmer. The expansion of Key Bank indicates that some in the industry sense that the Alaskan economy has stabilized enough to present opportunities for profit. First National Bank of Anchorage became the state's second billion dollar bank early in the second quarter of this year. Unlike other banks whose holdings were at best shaky, First National Bank of Anchorage has a record of being extremely conservative in its investments.

Also significant is that Alaska Housing Finance Corporation (AHFC) sold more homes then it repossessed in June of this year — 313 sold versus 288 repossessed. (See Figure 1.) If this trend continues, both the construction and FIRE sectors should benefit. As in the case of the first month of over-the-year employment growth, this is not an irrefutable sign of new found strength. It is certainly a welcome event for AHFC. As of May 31, 10.1% of AHFC loans on single family and duplex homes were over 30 days overdue, while 16.4% of condominium loans were overdue. However, only 4.15% of these loans were more than 120 days overdue and threatened with foreclosure.

### Government Employment Drops As Schools Close

Government employment posted an over-the-month decline in June; this development was expected with the summer time closure of schools. While local government was the largest loser, falling 2,500 over the month, the federal government payroll rose by approximately 500. When comparing levels to June of last year, state government rose the most — 6.6% (or about 1,200 employees). As of June, local governments in Alaska were employing slightly over 100 more persons than one year ago.

The state appropriated $63 million less for fiscal year 1990 than had been appropriated the prior year, setting this year's total budget at $2.35 billion. (The $2.35 billion figure excludes money received from federal sources, permanent fund dividends, or other money spent from the earnings of the permanent fund.) Gregg Erickson, of the Division of Policy in the Governor's

office, commented that the new budget "seems to reflect a big difference in attitude. In earlier years when rising oil prices boosted state revenue, the usual reaction was to spend more. This year revenue was up, but spending still came down. That's a big change. The legislature is beginning to look at the long term fiscal situation more closely."

As mentioned earlier, the state's capital budget actually increased for the year. Budgeted for declines were the operating budget, debt service fund and various loan programs. Preliminary estimates for FY 1990 show real per capita operating expenses (in FY 1990 dollars) to have fallen from $3,972 in FY 1989 to $3,767 in FY 1990. Total per capita expenditures also have fallen over the same period — by 5.6%, from $4535 to $4,281.

### Fish Processing Jobs Bolster the Manufacturing Sector

The state's manufacturing industry showed its normal, strong seasonal increase in June; employment rose more than 25% from its May level. Nearly all of this growth can be attributed to the seafood processing industry which gained 3,500 in employment for the month. Strong job gains in this industry were posted in all coastal regions. Some of the over-the-month growth can be attributed to the late May halibut opening. Because employment estimates are based on employment during that week which includes the 12th day of each month, the May figures didn't include halibut processing. Further, strong returns of reds and pinks helped significantly boost June employment levels.

Employment in the timber industry, the other major component of the manufacturing sector, increased by only 250. The industry started slowly in 1989, but like last year it has been operating at full capacity ever since. As a result, the over-the-year employment levels are virtually the same. For the manufacturing sector as a whole, employment levels are down very slightly compared to June 1988 figures.

The state's mining industry is showing growth both over the month and the year. Oil and gas mining continues to show some growth, but the majority of the increase is coming in minerals mining. Although much smaller than the oil and gas sector, minerals mining has risen by more than 25% over the year and by nearly 15% during June.

### Summary

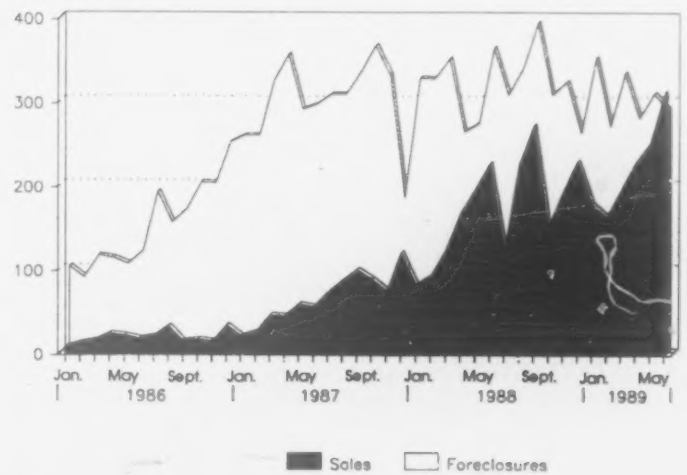
The 1989 Alaskan economy was expected to show slow but steady growth. This growth was to be accompanied by a strengthening in the labor market. Thus, this was the prospect: new jobs created during the year would employ Alaskans from a labor pool that was smaller than it had been in several years. Oil spill cleanup activities, however, quickly hired many workers from this labor pool. As a result, many employers have found it difficult this summer to find qualified workers. The numbers of persons employed in the cleanup have sent the state's unemployment rates to their lowest levels in many years. However, yet unknown are the ramifications of closing down the cleanup activities and the flooding of the labor market with several thousand unemployed workers.

*About the author:*

Brian Rae is a labor economist employed four years with the Research & Analysis Section, Administrative Services Division, Alaska Department of Labor. He is based in Juneau.

*Figure 1*

**AHFC Foreclosures vs. Sales**
**January 1986 Through June 1989**




Source: Alaska Housing Finance Corporation.

Table 5

# Labor Force By Region and Census Area

| | Labor Force | | | Unemployment | | | Rate | | | Employment | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | p/ 6/89 | r/ 5/89 | 6/88 | p/ 6/89 | r/ 5/89 | 6/88 | p/ 6/89 | r/ 5/89 | 6/88 | p/ 6/89 | r/ 5/89 | 6/88 |
| Alaska Statewide | 246,262 | 240,339 | 247,485 | 17,298 | 18,580 | 22,609 | 7.0 | 7.7 | 9.1 | 228,964 | 221,759 | 224,876 |
| Anch.-MatSu Region | 122,199 | 121,155 | 126,330 | 7,815 | 8,188 | 10,691 | 6.4 | 6.8 | 8.5 | 114,384 | 112,967 | 115,639 |
| Anchorage Borough | 108,468 | 107,523 | 111,890 | 6,091 | 6,345 | 8,468 | 5.6 | 5.9 | 7.6 | 102,377 | 101,178 | 103,422 |
| MatSu Borough | 13,731 | 13,632 | 14,440 | 1,724 | 1,843 | 2,223 | 12.6 | 13.5 | 15.4 | 12,007 | 11,789 | 12,217 |
| Gulf Coast Region | 32,750 | 30,086 | 28,054 | 2,052 | 2,393 | 2,991 | 6.3 | 8.0 | 10.7 | 30,698 | 27,693 | 25,063 |
| Kenai Peninsula Borough | 20,463 | 18,937 | 17,636 | 1,592 | 1,913 | 2,229 | 7.8 | 10.1 | 12.6 | 18,871 | 17,024 | 15,407 |
| Kodiak Island Borough | 7,315 | 6,608 | 6,196 | 237 | 223 | 418 | 3.2 | 3.4 | 6.7 | 7,078 | 6,385 | 5,778 |
| Valdez-Cordova | 4,972 | 4,541 | 4,222 | 223 | 257 | 344 | 4.5 | 5.7 | 8.1 | 4,749 | 4,284 | 3,878 |
| Interior Region | 35,143 | 34,540 | 36,767 | 3,266 | 3,756 | 4,463 | 9.3 | 10.9 | 12.1 | 31,877 | 30,784 | 32,304 |
| Fairbanks North Star Borough | 30,222 | 29,620 | 31,681 | 2,616 | 2,960 | 3,705 | 8.7 | 10.0 | 11.7 | 27,606 | 26,660 | 27,976 |
| Southeast Fairbanks | 1,965 | 1,985 | 2,051 | 169 | 251 | 231 | 8.6 | 12.6 | 11.3 | 1,796 | 1,734 | 1,820 |
| Yukon-Koyukuk | 2,956 | 2,935 | 3,035 | 481 | 545 | 527 | 16.3 | 18.6 | 17.4 | 2,475 | 2,390 | 2,508 |
| Northern Region | 8,239 | 8,005 | 8,352 | 886 | 820 | 949 | 10.8 | 10.2 | 11.4 | 7,353 | 7,185 | 7,403 |
| Nome | 3,224 | 3,075 | 3,143 | 482 | 396 | 383 | 15.0 | 12.9 | 12.2 | 2,742 | 2,679 | 2,760 |
| North Slope Borough | 2,914 | 2,829 | 2,949 | 171 | 148 | 187 | 5.9 | 5.2 | 6.3 | 2,743 | 2,681 | 2,762 |
| Northwest Arctic Borough | 2,101 | 2,101 | 2,260 | 233 | 276 | 379 | 11.1 | 13.1 | 16.8 | 1,868 | 1,825 | 1,881 |
| Southeast Region | 35,352 | 34,477 | 35,282 | 2,423 | 2,645 | 2,438 | 6.9 | 7.7 | 6.9 | 32,929 | 31,832 | 32,844 |
| Haines Borough | 877 | 869 | 888 | 70 | 89 | 83 | 8.0 | 10.2 | 9.3 | 807 | 780 | 805 |
| Juneau Borough | 15,933 | 15,374 | 15,902 | 886 | 829 | 894 | 5.6 | 5.4 | 5.6 | 15,047 | 14,545 | 15,008 |
| Ketchikan Gateway Borough | 6,510 | 6,342 | 6,482 | 481 | 513 | 468 | 7.4 | 8.1 | 7.2 | 6,029 | 5,829 | 6,014 |
| Pr. of Wales-Outer Ketchikan | 2,782 | 2,701 | 2,791 | 345 | 345 | 360 | 12.4 | 12.8 | 12.9 | 2,437 | 2,356 | 2,431 |
| Sitka Borough | 4,147 | 4,072 | 4,207 | 211 | 267 | 281 | 5.1 | 6.6 | 6.7 | 3,936 | 3,805 | 3,926 |
| Skagway-Yakutat-Angoon | 1,637 | 1,657 | 1,627 | 177 | 246 | 171 | 10.8 | 14.8 | 10.5 | 1,460 | 1,411 | 1,456 |
| Wrangell-Petersburg | 3,466 | 3,462 | 3,385 | 253 | 356 | 181 | 7.3 | 10.3 | 5.3 | 3,213 | 3,106 | 3,204 |
| Southwest Region | 12,579 | 12,076 | 12,700 | 856 | 778 | 1,077 | 6.8 | 6.4 | 8.5 | 11,723 | 11,298 | 11,623 |
| Aleutian Islands | 3,431 | 3,288 | 3,461 | 70 | 49 | 129 | 2.0 | 1.5 | 3.7 | 3,361 | 3,239 | 3,332 |
| Bethel | 4,870 | 4,639 | 4,878 | 458 | 387 | 504 | 9.4 | 8.3 | 10.3 | 4,412 | 4,252 | 4,374 |
| Bristol Bay Borough | 456 | 449 | 477 | 21 | 30 | 46 | 4.6 | 6.7 | 9.6 | 435 | 419 | 431 |
| Dillingham | 2,200 | 2,135 | 2,208 | 104 | 115 | 130 | 4.7 | 5.4 | 5.9 | 2,096 | 2,020 | 2,078 |
| Wade Hampton | 1,622 | 1,565 | 1,676 | 203 | 197 | 268 | 12.5 | 12.6 | 16.0 | 1,419 | 1,368 | 1,408 |

Notes: p/ denotes preliminary estimates r/ denotes revised estimates Benchmark: 1988

- Federal guidelines require the use of unrounded labor force data, adjusted to be consistent with the Current Population Survey in formulas used to allocate federal funds.
- Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor.
- The official definitions of unemployment currently in place exclude anyone who has made no attempt to find work in the four-week period up to and including the week that includes the 12th of each month. Most Alaska economists believe that Alaska's rural localities have proportionately more of these discouraged workers.
- The employment numbers that appear above are definitionally different from those that appear in the Nonagricultural Wage & Salary Employment tables.

# Newly Released DOL Publications

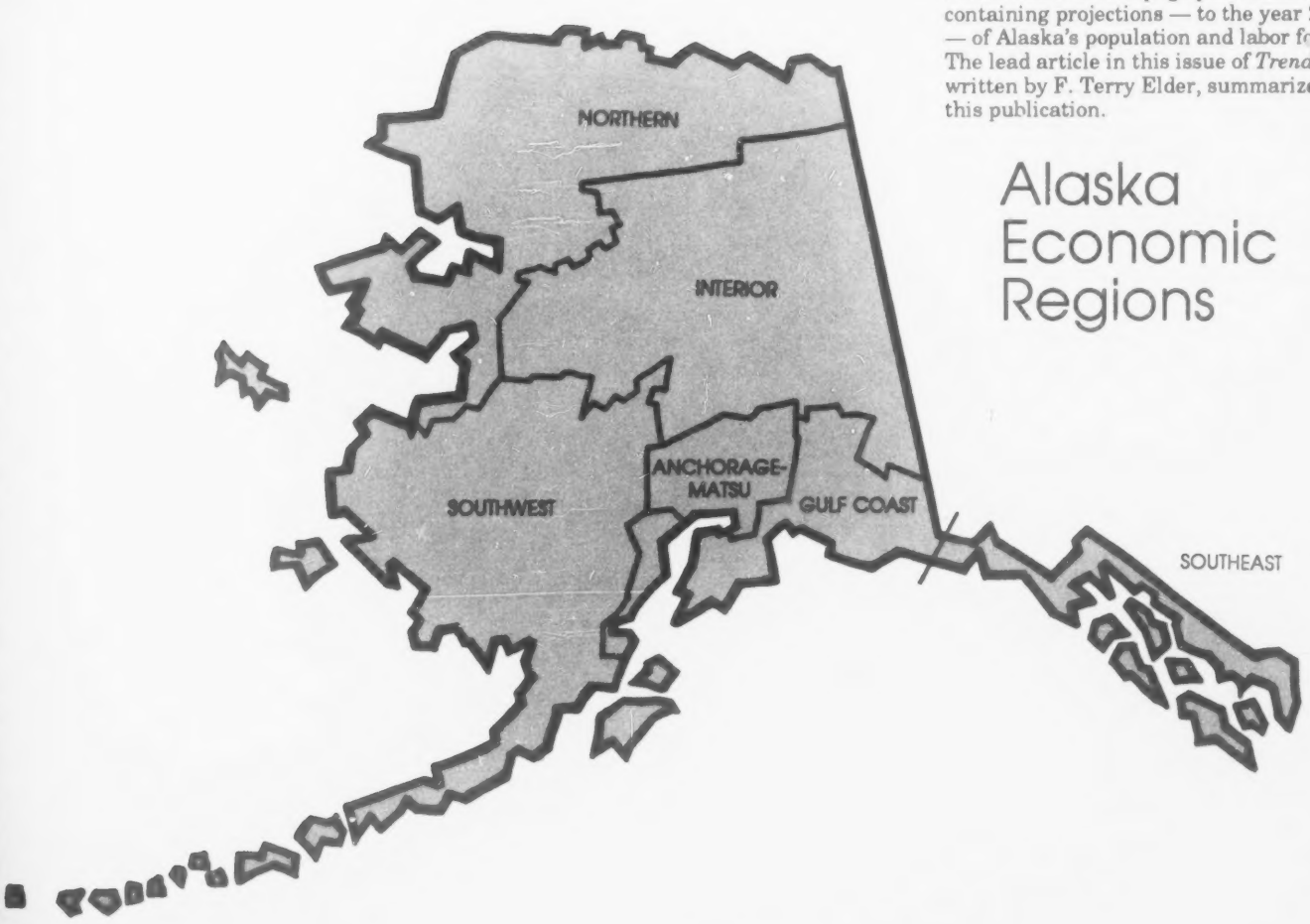
Available as of the last few weeks through the Alaska Department of Labor (DOL) Research & Analysis Section (R&A) are three new publications:

- *Alaska Population Overview — 1986 and Provisional 1987 Estimates,*
- *Alaska Directory of Licensed Occupations,* and
- *Alaska 2000 — Population, Labor Force and Employment in the Year 2000*

*Alaska Population Overview*, a 131-page publication written by a state demographer, includes a broad array of information about statewide and regional population trends, and breaks out Alaska's population by race, age and sex. According to the author, Greg Williams, "the 1988 estimates show a net out-migration from nearly every area of the state except Southeast Alaska."

*Alaska Directory of Licensed Occupations*, a 44-page publication, briefly describes 58 Alaska occupations that require licenses issued by various state and federal agencies. The publication also lists and describes eight occupations regulated by the Municipality of Anchorage. In addition, the publication details the education, experience, professional examinations and fees required of each occupation by the appropriate regulating agency. And it lists the current number of license holders for each occupation.

*Alaska 2000* is a 95-page publication containing projections — to the year 2000 — of Alaska's population and labor force. The lead article in this issue of *Trends*, written by F. Terry Elder, summarizes this publication.




Alaska Economic Regions

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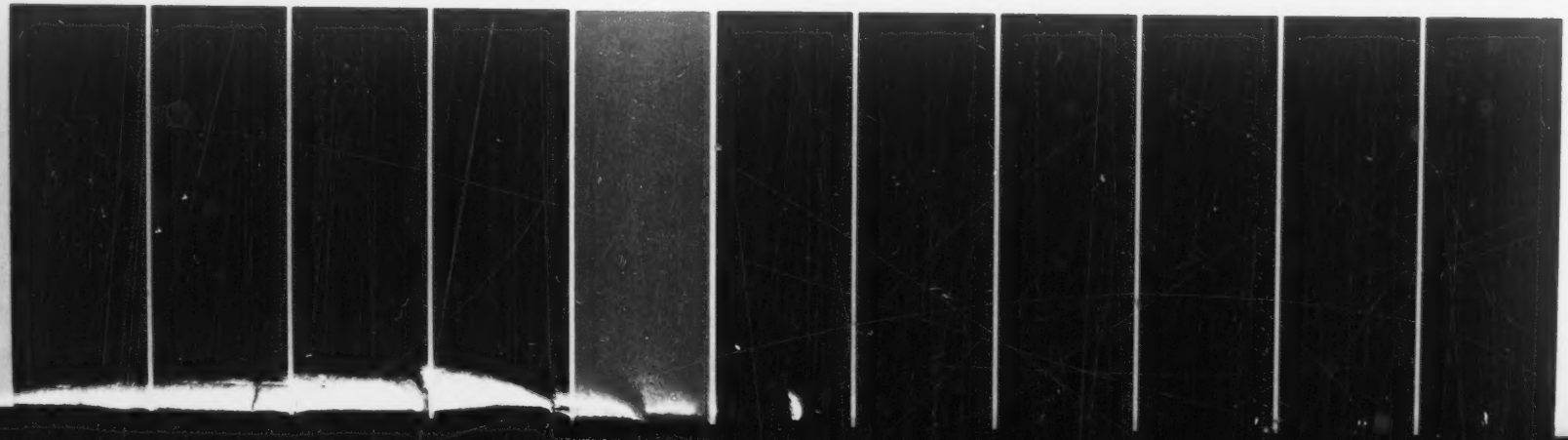

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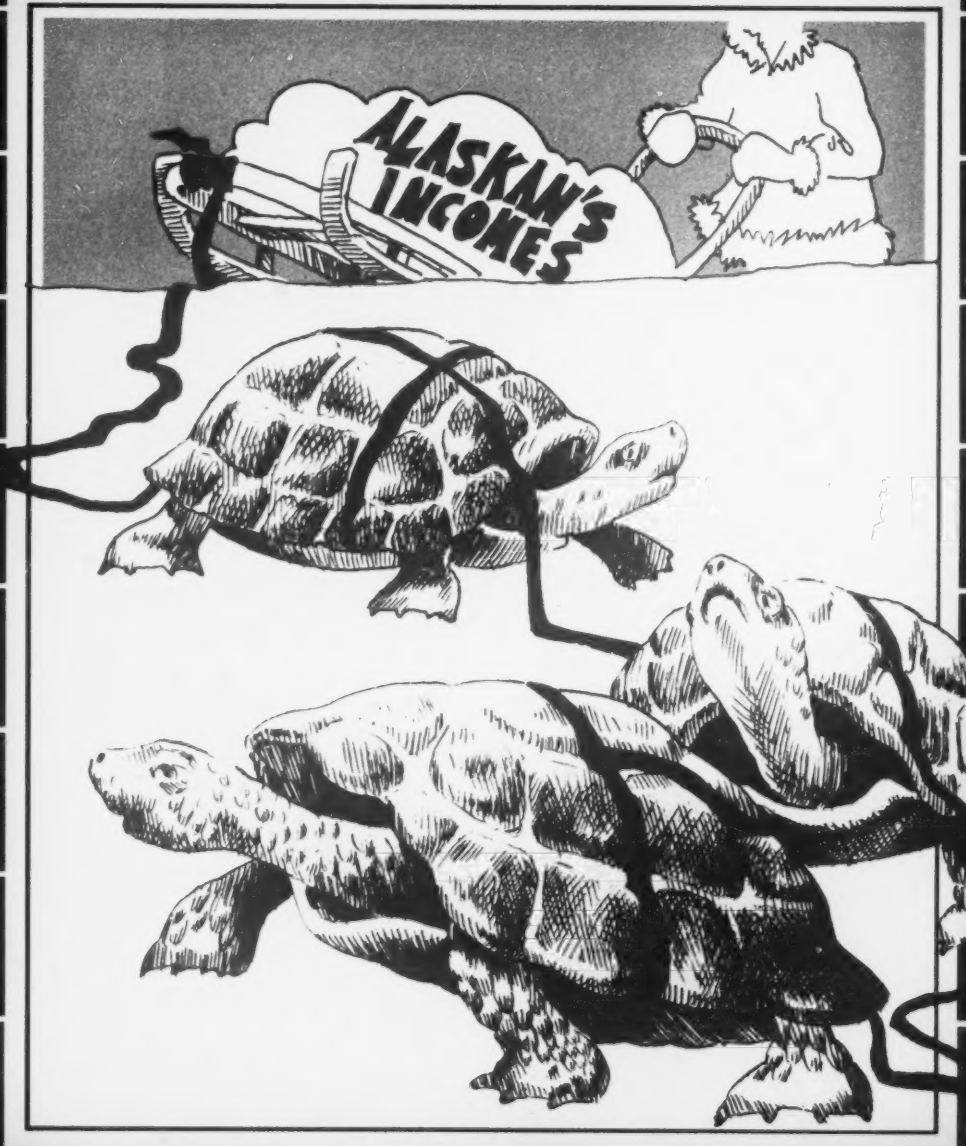
# ALASKA ECONOMIC TRENDS




Alaska's Income Picture Brightened in 1987&1988

Measuring the Cost of Living

Alaska's July Unemployment Rate Fell To A Record Low

ALASKA DEPARTMENT OF LABOR STEVE COWPER, GOVERNOR

ALASKA ECONOMIC
# TRENDS

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*Alaska Economic Trends* is a monthly publication dealing with economic-related issues of Alaska. Opinions and analyses expressed by guest authors may not be consistent with those of the Alaska Department of Labor.

We welcome contributions on current economic issues from our readers. For a copy of our editorial policy contact the Editor, *Alaska Economic Trends*, Alaska Department of Labor, P.O. Box 25501, Juneau, Alaska 99802-5501, Telephone: (907) 465-4500.

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*Jim Sampson*, Commissioner, Department of Labor

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*Michael Fagan*, Editor

**October 1989**
**Volume 9**

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MADE in ALASKA

*Cover Design by Jim Fowler*

# Alaska's Income Picture Brightened in 1987 & 1988

By Neal Fried

Alaska's total personal income broke the $10 billion barrier in 1988. (See Table 1.) After losing ground in 1987, the growth in 1988 was additional confirmation that the recession was ending. (See Figure 1).

Alaska's personal income picture continued to improve in 1989, too. First quarter 1989 figures registered a 7.2% increase over 1st quarter 1988 levels.

### Alaskans' 1988 Income Growth Sluggish Compared to Other States

Although Alaska's personal income has risen, it's been sluggish compared to other states. Alaska's personal income grew 3.4% in 1988; nationwide, it grew 7.6% that year. Alaska's 1988 rate of income growth found company among the bottom seven states in the nation. All of this company was with oil–producing and farm states.

The state's present income picture is lackluster compared to prior years. Between 1980 and 1985 Alaska's personal income grew 12% per year. During the 1970–1980 decade, it grew 14% per year. And although inflation in Alaska (measured by the Anchorage Consumer Price Index) fell to record lows during the past two years, income gains were stronger in past years when inflation was considerably higher. In inflation–adjusted dollars, personal income growth was 7.2% per year from 1980 to 1985. In 1988, inflation–adjusted personal income growth was 3.0%.

*Table 1*

**Total and Per Capita Personal Income Alaska & U.S. 1970-1988**

| | Alaska total (in millions of dollars) | U.S. total (in millions of dollars) | Alaska per capita (in dollars) | U.S. per capita (in dollars) | Alaska percent of U.S. per capita |
|---|---|---|---|---|---|
| 1970 | $ 1,517 | $ 825,528 | $ 4,986 | $ 4,051 | 123% |
| 1971 | 1,671 | 888,453 | 5,279 | 4,296 | 123 |
| 1972 | 1,832 | 976,071 | 5,610 | 4,664 | 120 |
| 1973 | 2,160 | 1,095,076 | 6,482 | 5,181 | 125 |
| 1974 | 2,632 | 1,204,070 | 7,635 | 5,644 | 135 |
| 1975 | 3,755 | 1,307,539 | 10,121 | 6,069 | 167 |
| 1976 | 4,521 | 1,446,099 | 11,499 | 6,647 | 173 |
| 1977 | 4,674 | 1,601,844 | 11,764 | 7,289 | 161 |
| 1978 | 4,805 | 1,806,207 | 11,947 | 8,133 | 147 |
| 1979 | 5,017 | 2,026,684 | 12,435 | 9,025 | 138 |
| 1980 | 5,586 | 2,252,021 | 13,797 | 9,910 | 139 |
| 1981 | 6,449 | 2,514,231 | 15,492 | 10,949 | 141 |
| 1982 | 7,739 | 2,663,432 | 17,371 | 11,481 | 151 |
| 1983 | 8,758 | 2,834,385 | 18,164 | 12,098 | 150 |
| 1984 | 9,140 | 3,101,163 | 18,093 | 13,114 | 138 |
| 1985 | 9,802 | 3,317,545 | 18,795 | 13,896 | 135 |
| 1986 | 9,818 | 3,519,211 | 18,506 | 14,596 | 127 |
| 1987 | 9,680 | 3,766,075 | 18,461 | 15,472 | 119 |
| 1988 | 10,006 | 4,052,992 | 19,079 | 16,489 | 116 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

**The information presented in this article has a variety of uses. The income and wage data tell of Alaskans' purchasing power in different areas of the state. This same information can be used as a yardstick to measure the economic health of the entire state, of a particular area, or of a particular industry. The average monthly wage data provide one indication to employers about the cost of doing business. The poverty guidelines are used to determine eligibility for many federal programs. All of this income and wage data, when combined with cost of living information, can paint a picture of Alaskans' economic well being.**

**Personal Income . . .
According to BEA:**

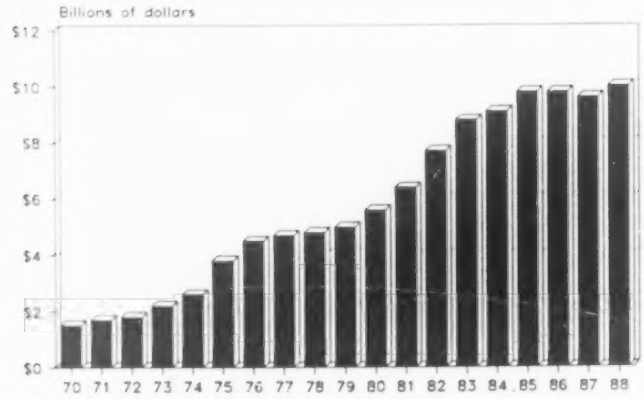
Personal income data are produced by the federal Bureau of Economic Analysis (BEA), an agency of the U.S. Department of Commerce. Personal income covers all sources of cash income that accrue to individuals during a specific time period. This income is then aggregated to produce figures for areas, states and regions. The personal income figures are adjusted for residency by subtracting income earned by nonresidents. For example, in 1988, $456 million was subtracted from Alaska's total personal income to adjust for residency.

When BEA calculates personal income figures they include:

- Earnings (which consist of wages and salaries, other labor income, and proprietors' income),
- Dividends, interest, and rent on assets, and
- Transfer payments (which include private and government pension plans, social security, welfare programs and unemployment benefits.) In Alaska, Longevity Bonus payments and Permanent Fund dividends are also included.

*Figure 1*

**Alaska Total Personal Income 1970-1988**




Sources: U.S. Department of Commerce, Bureau of Economic Analysis.

**Earnings Are Largest Portion of the Income Pie**

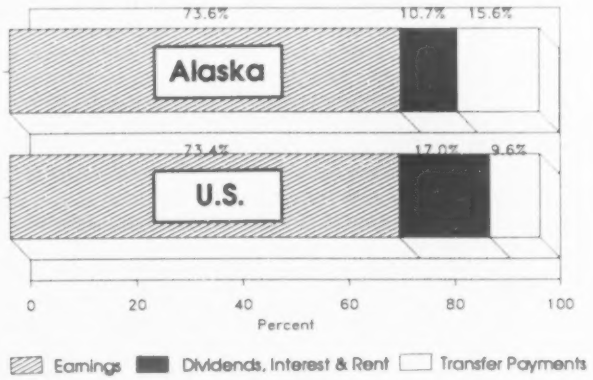
Figure 2 clearly identifies earnings as the major source of personal income. For both Alaska and the U.S., the proportions are nearly identical. But significant differences appear in the dividend, interest, rent, and transfer payment sources.

Part of the explanation for the differences is demographic. A younger population has had less time to accumulate capital assets than an older population. And Alaska's population is the second youngest in the nation.

The considerably larger share of transfer payments in Alaska is primarily due to the state's unique Longevity Bonus and Permanent Fund Dividend programs. This sum was nearly equivalent to all retirement and disability benefits (including social security benefits) disbursed in the state last year.

*Figure 2*

**Personal Income by Source Alaska & U.S.**




Sources: U.S. Department of Commerce, Bureau of Economic Analysis.

**Income Sources Shift Over Time**

All three major sources of personal income contributed to total Alaska personal income growth in 1988 and 1989. During the recessionary years of 1986–1987, earnings were falling because of job losses. At the same time, transfer payments were growing in importance because of growth in welfare, social security, and unemployment benefits.

If we look at the income mix over time, there have been significant shifts. Earnings' share declined from 84% of total personal income in 1980 to 74% in 1988. This happened partly because transfer payments became a considerably more important source of income for Alaskans with the 1982 advent of the Permanent Fund dividend program.

Personal income is projected to grow throughout the rest of 1989 because of the present economic expansion taking place. One economist estimated that the Exxon Valdez oil spill alone would add a 1-2% increase to personal income. The improved personal income picture is just another economic indicator confirming that Alaska's economy is moving forward again.

### Are Alaskans As Well Off As They Used to Be?

Per capita income is one economic measure used to answer the question, 'Are Alaskans as well off as they used to be?' Per capita income is simply the total personal income of an area divided by the area's resident population (every man, woman and child).

In earlier years, Alaska's per capita income was an impressive figure that garnered many a headline. As late as 1985 Alaska enjoyed the status of being the state with the highest per capita income in the nation. (See Figure 3.) Since 1973, Alaska's per capita income registered at least 25% above the national average and peaked at an extraordinary 73% above in 1976. Even as late as 1983 Alaska's per capita income was 50% higher than the national average. But in 1986 and 1987 Alaska's per capita income fell as a result of the recession. Meanwhile, the national average forged ahead. Alaska's difference fell to 16%, hardly an impressive figure when the state's high cost of living is figured in. (See Cost of Living article elsewhere in this issue.)

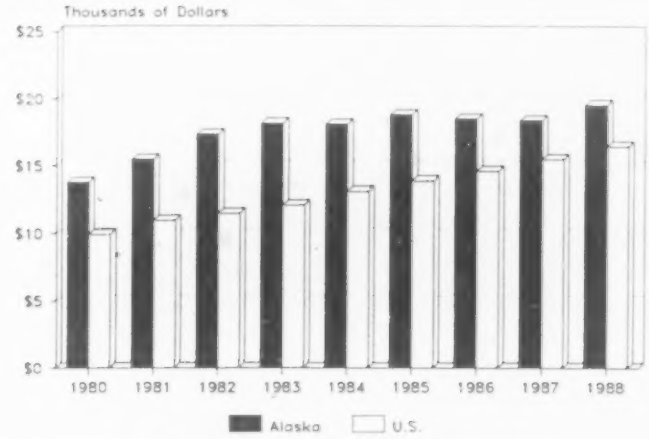
Alaska's per capita income picture improved in 1988, growing by 3.3% to $19,079. (See Table 2.) The recovery in per capita income was not accompanied, though, by an improvement relative to the rest of the nation. In fact, Alaska's per capita income, which for 13 consecutive years was ranked number 1, is ranked 7th this year.

### Alaska's Per Capita Income Varies Dramatically

Personal per capita income figures are available for the state's boroughs and census areas. Unfortunately, because they lag behind the state figures by a year, the most recent figures are those of 1987. These figures should be used with caution because income sources at these levels are more difficult to derive. Population estimates at these levels tend to be less accurate, and aberrations in an area's population can create misleading results. For example, a large college population could unduly

*Figure 3*

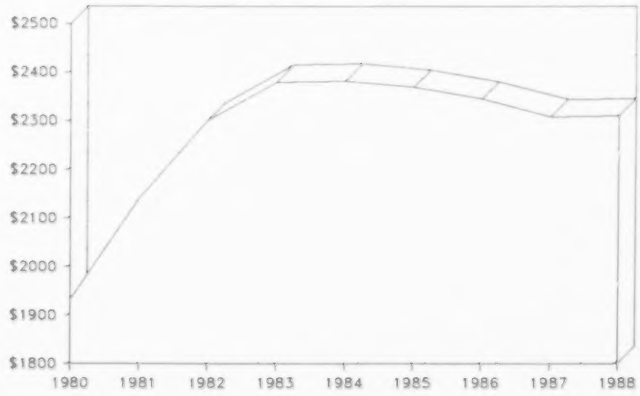
**Per Capita Income for Alaska & U.S.**




Sources: U.S. Department of Commerce, Bureau of Economic Analysis.

*Figure 4*

**Alaska's Average Monthly Wage 1980-1988**




Sources: Alaska Department of Labor, Research & Analysis.

Table 2

## Per Capita Personal Income by State 1987-1988

| | 1988 | 1987 | '87-'88 percent change | 1988 percent of U.S. | 1988 average persons per household | 1988 average household income |
|---|---|---|---|---|---|---|
| Connecticut | $23,059 | $21,258 | 8.5% | 140% | 2.60 | $59,953 |
| District of Columbia | 21,389 | 19,543 | 9.4 | 130 | 2.35 | 50,264 |
| New Jersey | 21,994 | 20,277 | 8.5 | 133 | 2.56 | 56,305 |
| Massachussets | 20,816 | 19,131 | 8.8 | 126 | 2.66 | 55,371 |
| Maryland | 19,487 | 18,217 | 7.0 | 118 | 2.85 | 55,538 |
| New Hampshire | 19,434 | 18,083 | 7.5 | 118 | 2.66 | 51,694 |
| New York | 19,305 | 17,943 | 7.6 | 117 | 2.56 | 49,421 |
| ALASKA | 19,079 | 18,461 | 3.3 | 116 | 2.66 | 50,750 |
| California | 18,753 | 17,770 | 5.5 | 114 | 2.67 | 50,071 |
| Virginia | 17,675 | 16,539 | 6.9 | 107 | 2.63 | 46,485 |
| Deleware | 17,661 | 16,305 | 8.3 | 107 | 2.60 | 45,919 |
| Illinois | 17,575 | 16,394 | 7.2 | 107 | 2.62 | 46,047 |
| Nevada | 17,511 | 16,359 | 7.0 | 106 | 2.49 | 43,602 |
| Rhode Island | 16,892 | 15,683 | 7.7 | 102 | 2.99 | 50,507 |
| Hawaii | 16,753 | 15,569 | 7.6 | 102 | 2.56 | 42,888 |
| Minnesota | 16,674 | 15,789 | 5.6 | 101 | 2.58 | 43,019 |
| Florida | 16,603 | 15,594 | 6.5 | 101 | 2.49 | 41,341 |
| Michigan | 16,552 | 15,558 | 6.4 | 100 | 2.46 | 40,718 |
| U.S. | 16,489 | 15,472 | 6.6 | 100 | 2.62 | 43,201 |
| Washington | 16,473 | 15,634 | 5.4 | 100 | 2.54 | 41,841 |
| Colorado | 16,463 | 15,680 | 5.0 | 100 | 2.66 | 43,792 |
| Pennsylvania | 16,233 | 15,198 | 6.8 | 98 | 2.60 | 42,206 |
| Kansas | 15,759 | 15,089 | 4.4 | 96 | 2.52 | 39,713 |
| Ohio | 15,536 | 14,575 | 6.6 | 94 | 2.55 | 39,617 |
| Wisconsin | 15,524 | 14,674 | 5.8 | 94 | 2.59 | 40,207 |
| Missouri | 15,452 | 14,630 | 5.6 | 94 | 2.59 | 40,021 |
| Vermont | 15,302 | 14,267 | 7.3 | 93 | 2.55 | 39,020 |
| Georgia | 15,260 | 14,387 | 6.1 | 93 | 2.52 | 38,455 |
| Maine | 15,106 | 13,996 | 7.9 | 92 | 2.46 | 37,161 |
| Arizona | 14,970 | 14,322 | 4.5 | 91 | 2.68 | 40,120 |
| Indiana | 14,924 | 13,987 | 6.7 | 91 | 2.54 | 37,907 |
| Oregon | 14,885 | 13,906 | 7.0 | 90 | 2.67 | 39,743 |
| Nebraska | 14,774 | 14,100 | 4.8 | 90 | 2.51 | 37,083 |
| Iowa | 14,662 | 14,028 | 4.5 | 89 | 2.60 | 38,121 |
| Texas | 14,586 | 13,840 | 5.4 | 88 | 2.74 | 39,966 |
| North Carolina | 14,304 | 13,353 | 7.1 | 87 | 2.57 | 36,761 |
| Tennessee | 13,873 | 12,977 | 6.9 | 84 | 2.67 | 37,041 |
| Wyoming | 13,609 | 12,836 | 6.0 | 83 | 2.58 | 35,111 |
| Oklahoma | 13,323 | 12,607 | 5.7 | 81 | 2.54 | 33,840 |
| South Carolina | 12,926 | 12,078 | 7.0 | 78 | 2.62 | 33,866 |
| Montana | 12,866 | 12,304 | 4.6 | 78 | 2.75 | 35,382 |
| Alabama | 12,851 | 12,039 | 6.7 | 78 | 2.58 | 33,156 |
| North Dakota | 12,833 | 12,825 | 0.1 | 78 | 2.58 | 33,109 |
| Kentucky | 12,822 | 11,996 | 6.9 | 78 | 2.71 | 34,748 |
| South Dakota | 12,755 | 12,414 | 2.7 | 77 | 2.67 | 34,056 |
| Idaho | 12,665 | 11,797 | 7.4 | 77 | 2.75 | 34,829 |
| New Mexico | 12,488 | 11,889 | 5.0 | 76 | 2.57 | 32,094 |
| Louisiana | 12,292 | 11,506 | 6.8 | 75 | 2.77 | 34,049 |
| Arkansas | 12,219 | 11,421 | 7.0 | 74 | 2.59 | 31,647 |
| Utah | 12,193 | 11,530 | 5.8 | 74 | 3.17 | 38,652 |
| West Virginia | 11,735 | 11,013 | 6.6 | 71 | 2.61 | 30,628 |
| Mississippi | 11,116 | 10,301 | 7.9 | 67 | 2.78 | 30,902 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

depress an area's income because students' earnings are usually low.

The diversity in regional per capita income shown in Table 3 is astounding. It reaches a high of $26,505 in the Haines Borough and dives to $9,075, in the Wade Hampton Census Area of southwest Alaska. The cause of the difference usually can be attributed to the presence of a major industry in an area. For those local economies with a major industry such as fishing, oil, government or timber, per capita income tends to be higher. Areas with low per capita income typically don't have much economic infrastructure. This usually translates into lower incomes for Alaska's rural areas. For example, rural areas such as those near Bethel, Nome, and the Northwest Arctic Borough have low per capita income. There are, however, significant exceptions — the North Slope Borough, where oil development is dominant, and the Bristol Bay Borough, where the fisheries bring wealth. The more urban communities of the state, such as Fairbanks, Anchorage, Juneau, and Ketchikan, enjoy above average per capita income.

### Household Income and Median Family Income:

Estimates for household income are shown in Table 2. They are derived by multiplying the per capita income figures by average household size as estimated by the U.S. Census Bureau. When comparisons are made to all of the U.S., Alaska's household income fares slightly better than personal income because Alaska's average household size is also above the national average.

Table 4 shows Alaska median family income statistics — broken out by boroughs and census areas — calculated by the U.S. Department of Housing and Urban Development.

### Alaska's Wages and Salaries Also Grew In 1988

Like in the personal income picture, Alaska's wages and salaries also began to eke out some growth in 1988. Alaska's total wage and salary income of $5.9 billion grew by 2% in 1988. Alaska's wage and salary trends tend to dovetail personal income trends because wages and salaries make up such a large component of income.

The average monthly wage data presented in Tables 5 and 6 represent the gross wages paid per job. Gross wages don't necessarily portray what an individual earns because more than one individual may hold one of these jobs over the course of the year. This wage data also doesn't differentiate between part– and full–time workers. What it does provide is the average monthly wage cost to an employer (wage cost only, excluding benefits). Also, average monthly wage data provide broad wage trends and give an indication of average compensation by industry and geographic area.

### Average Monthly Wages Vary Among Industries and Areas

The top average monthly wage of $5,126 is paid by the mining industry (which is comprised almost entirely of the oil industry). This compares to the bottom wage paid by the retail trade industry, $1,274. This disparity exists for two reasons: the industries compensate their employees differently, and the employees work a differing number of hours. Mining industry employment is characterized by lots of overtime work, while the retail industry is a major employer of part–time help.

The differences in average monthly wages attributable to geography is as dramatic as the disparity that exists in average monthly wages between industries. The geographical difference exists for most of the same reasons as those of personal income. Unlike personal income, however, the average monthly wage data aren't adjusted for residency. For example, the North Slope's average wage would be substantially lower if most of the oil industry's wages were subtracted from the area.

Table 3

## Alaska's Per Capita Income by Census Area 1985-1987

| | 1985 | 1986 | 1987 | Percent of U.S. | Rank in state | 1986-87 percent change |
|---|---|---|---|---|---|---|
| ALASKA | $18,795 | $18,506 | $18,461 | 119.0% | -- | -0.2% |
| U.S. | 13,896 | 14,596 | 15,472 | 100.0 | -- | 6.0 |
| Aleutian Islands | 16,786 | 17,063 | 17,309 | 111.9 | 11 | 1.4 |
| Anchorage Borough | 20,974 | 21,111 | 21,102 | 136.4 | 5 | 0.0 |
| Bethel Census Area | 11,243 | 11,313 | 11,466 | 74.1 | 22 | 1.4 |
| Bristol Bay Borough | 24,538 | 25,065 | 23,772 | 153.6 | 2 | -5.2 |
| Dillingham Census Area | 14,780 | 14,815 | 14,657 | 94.7 | 15 | -1.1 |
| Fairbanks North Star Borough | 18,473 | 17,031 | 16,780 | 108.5 | 12 | -1.5 |
| Haines Borough | 21,512 | 24,366 | 26,505 | 171.3 | 1 | 8.8 |
| Juneau Borough | 23,163 | 21,666 | 21,949 | 141.9 | 3 | 1.3 |
| Kenai Peninsula Borough | 15,982 | 15,835 | 15,306 | 98.9 | 14 | -3.3 |
| Ketchikan Gateway Borough | 19,360 | 20,603 | 21,944 | 141.8 | 4 | 6.5 |
| Kodiak Island Borough | 14,352 | 15,680 | 16,190 | 104.6 | 13 | 3.3 |
| Matanuska-Susitna Borough | 15,273 | 13,767 | 13,408 | 86.7 | 18 | -2.6 |
| Nome Census Area | 13,899 | 13,344 | 13,886 | 89.7 | 16 | 4.1 |
| North Slope Borough | 25,041 | 20,499 | 19,861 | 128.4 | 8 | -3.1 |
| Northwest Artic Borough | 12,849 | 12,343 | 12,273 | 79.3 | 19 | -0.6 |
| Prince of Wales-Outer Ketchikan C.A. | 14,502 | 14,283 | 13,440 | 86.9 | 17 | -5.9 |
| Sitka Borough | 17,155 | 17,914 | 18,129 | 117.2 | 9 | 1.2 |
| Skagway-Yakutat-Angoon Census Area | 16,849 | 18,289 | 17,428 | 112.6 | 10 | -4.7 |
| Southeast Fairbanks Census Area | 12,757 | 12,607 | 11,634 | 75.2 | 21 | -7.7 |
| Valdez-Cordova Census Area | 20,982 | 20,635 | 20,672 | 133.6 | 7 | 0.2 |
| Wade Hampton Census Area | 8,453 | 8,550 | 9,075 | 58.7 | 23 | 6.1 |
| Wrangell-Petersburg Census Area | 19,633 | 20,020 | 20,708 | 133.8 | 6 | 3.4 |
| Yukon-Koyukuk Census Area | 12,288 | 12,235 | 11,788 | 76.2 | 20 | -3.7 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

### Average Monthly Wage Peaked In 1984

Alaska's overall average monthly wage peaked at $2,382 in 1984 and continued to fall through 1987. (See Figure 4.) Much of the decline can be attributed to a decline in the construction industry's share of total employment. The construction industry commands the second highest average monthly wage at $3,315. (Commanding the highest average monthly wage is mining.)